ENVIRONMENTAL LIABILITY MANAGEMENT, INC.

Buckingham Green II
4920 York Road, Suite 290
P.O. Box 306
Holicong, PA 18928-0306
Tel: (215) 794-6920
Fax: (215) 794-6921
www.exploreELM.com

Corporate Office

Princeton, NJ

March 17, 2009

-- Via Email and FedEx --

Mr. Doug Tomchuk
USEPA
290 Broadway, 19th Floor
New York, NY 10007-1866

RE: Berry's Creek Study Area (BCSA) – Notification of Remedial Investigation/Feasibility Study (RI/FS) Contractor

Dear Mr. Tomchuk:

In accordance with paragraph 29 of the Administrative Settlement Agreement and Order on Consent (AOC) for RI/FS BCSA, this letter serves as notification of the selection of a subcontractor for a portion of the RI/FS activities. The BCSA Cooperating PRP Group's (Group) contractor Geosyntec Consultants, Inc. (Geosyntec) has selected EEA, Inc to assist with various field activities as part of the RI/FS. EEA's role on the project includes:

- Providing field equipment, boat captains, and sampling technicians to support sampling of various media.
- Conducting and/or assisting with ecological investigation activities.
- Providing field support (e.g., boat, captain, and field technician) for reference area evaluation activities.

EEA has strong qualifications in marine, wetlands and estuary ecological evaluations and sediment and water sample collection including vibracoring. Attachment A presents a summary of EEA's qualifications and qualifications of key personnel (resumes) undertaking the Work for the Group. In addition, EEA has a quality system which complies with ANSI/ASQC E4-1994 (Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs; American National Standard, January 5, 1995, or most recent). Their current Quality Management Plan (QMP) is under revision and a copy of the proposed contractor's QMP will be provided under a separate cover in advance of any sampling work.

If you have any questions regarding this contractor's qualifications, please do not hesitate to contact me. Subsequent submittals will identify the additional subcontractors that will be part of the RI/FS project team.

Sincerely,

ENVIRONMENTAL LIABILITY MANAGEMENT, INC.

Peter P. Brussock, Ph.D.
Project Coordinator

PPB:ng

Enclosures

c: Gwen Zervas, NJDEP

Attachment A

EEA, *Inc.* **Marine Ecology, Wetlands, and Dredging Qualifications**

EEA, Inc. is a professional environmental consulting firm established in 1979 to provide expert technical and procedural assistance to its national and international clients. The principals of the firm and all senior personnel each have a minimum of twenty years of professional engineering and consulting experience. The company's staff of approximately 25 professional and technical employees provide expertise in the following basic areas:

- Waterfront development, environmental feasibility studies, aquatic and terrestrial ecology studies, wetland studies and environmental permitting
- Vibratory coring studies
- Air quality and noise measurements and modeling
- Phase I Environmental Site Assessments
- Phase II and III Hazardous Waste Testing and Site Remediation
- Environmental compliance/liability assessments

Since its founding, EEA has worked with industrial clients, government agencies, and private corporations on a wide variety of projects. These have included site feasibility studies, testing/remediation programs, technical support studies for environmental impact statements for major commercial and industrial projects, air quality and noise studies, wetlands/ecological surveys, pre-dredge studies, and environmental site assessments of real property (industrial, commercial, residential) for major tri-state area financial institutions. Although most of this work has been concentrated in the northeastern United States, EEA has also undertaken environmental studies in Europe and Mexico. In addition to its staff of professional engineers, scientists and planners, EEA maintains and operates two fully equipped research vessels for sampling operations in the New York & New Jersey metropolitan waterways.

EEA has two offices: Garden City, Long Island, New York, (516) 746-4400 and
Stony Brook, Long Island, New York, (631) 751-4600
www.eeaconsultants.com

Marine Ecology Qualifications

EEA, *Inc.* is one of the few Environmental Consulting Firms that has extensive experience in addressing marine, wetland, and terrestrial impacts of proposed major developments in the metropolitan New York and Long Island region, as well as preparing NEPA EISs and CEQR EISs. EEA's ecological division is directed by Roy R. Stoecker, Ph.D. and Vice President of EEA. With two office locations based on Long Island, he is assisted by a staff of experienced ecologists and scientists of various disciplines. EEA has a biological laboratory, two full-sized research boats, and ecological physical sampling equipment. EEA's capabilities span a variety of disciplines, including all aspects of marine studies, vibratory coring, freshwater and tidal wetland assessments including mitigation and restoration plans, wildlife surveys, rare species assessments, terrestrial surveys and landscape design. Recent projects include the following:

ATLANTIC COAST OF LONG ISLAND: FIRE ISLAND INLET TO MONTAUK POINT, NEW YORK

Client: United States Army Corps of Engineers

EEA, as ecological subcontractors to the joint venture URS Greiner/Moffat and Nichol, has been working on both the Fire Island Interim Plan (FIIP) and the Storm Damage Reduction Reformulation Study. Both of these projects focus on natural resource assessments for storm damage protection. Listed below are representative studies included in the overall project.

Field Biological Studies

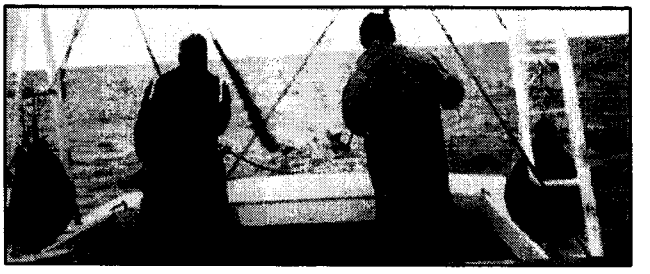
EEA conducted numerous comprehensive field studies for the Storm Damage Reduction Reformulation Study. Brief descriptions of representative studies are listed below.

Reformulation Study: Intertidal Wetland and Estuarine Finfish Study

EEA conducted a multi-year, baseline survey of the backbay habitats of the Reformulation Study Area. The study included several phases:

- A beach seine survey of shoreline and pond habitats,
- A throw trap survey of vegetation and animals in flooded marsh areas, and
- A benthic core survey of West Hampton Island.
- A seine-comparison study was performed in cooperation with the NYSDEC.

West of Shinnecock Inlet and Cherry Grove: Offshore Borrow Area Multi-Species Sampling



An intensive fisheries field sampling program was requested by the NYSDEC in order to verify biological conditions of the West of Shinnecock and Cherry Grove Borrow sites in support of the State's permit evaluation and issuance of a Water Quality Certificate. The project included Borrow Area sampling over a multi-year period. EEA conducted yearly trawl surveys. Fish and macroinvertebrate samples were processed for abundance, biomass, and species diversity. A subsample of economically important finfish species was processed for stomach analysis and age composition.

Eastern Shore Zone Intertidal Benthic Invertebrate Survey

A comparative study of beach invertebrates on the West Hampton barrier island. EEA collected and analyzed benthic core samples from the intertidal zone associated with the 1992-1993 breach, the nearby groin field, the backbay environment, and a control area located up-drift of the breach area.

Reformulation Benthos Studies I, II, and III: Napeague to East of Fire Island Inlet

Survey of the infaunal environment in the proposed Borrow Areas of the Reformulation study. EEA collected and processed benthic and water samples from eight proposed offshore borrow areas.

Ecological Mapping

Analysis of Historic Vegetation Zonation Changes Associated with Breach and Overwash Events, Sediment, Breaching and Aerial Vegetation

EEA performed a comparative examination of vegetative patterns at historic breach and overwash locations on the barrier islands. The analysis included a narrative description accompanied by aerial photographs of the habitats immediately prior to disturbance and following the overwash/breaching events.

Mapping the Backbay Sub-Aquatic Vegetation (SAV) Beds

EEA analyzed information on backbay submerged aquatic eelgrass beds and other macroalgae occurrences. Color aerial photographs were used for GIS vegetative mapping. ArcView software (ESRI) was used to digitize species vegetative stand lines and match the boundary edges of wetland and upland transitional areas.

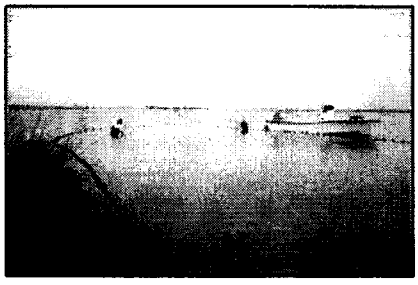
Survey of Backbay Benthic Habitats

EEA surveyed the backbay habitat of Pike's Beach using a state-of-the-art acoustical profiling technique known as RoxAnn. RoxAnn recorded bathymetry, sediment types, macrobenthic invertebrates, and re-establishment of SAV's into areas disturbed by the breach/closure activities.

GIS Biological Data Input

EEA assisted in assembling existing physical and environmental information related to sand sources along the south shore of Long Island. A comparative analysis of the sites was made in order to identify future data collection requirements. The data was assembled and analyzed using a Geographic Information System (GIS) database.

Data Reports – with focus on EIS and data gap analysis



West of Shinnecock Environmental Assessment Form and Fire Island Interim Environmental Impact Statement

Projects developed under the FIIP include an Environmental Assessment (EA) for NEPA. The natural resources section, completed by EEA, included descriptions of the proposed action, alternatives to the proposed action, affected environments, and environmental consequences of the proposed action and alternatives.

EEA worked with USACE on the Natural Resources sections of the Draft EIS (FIIP) and the larger Reformulation Project and Cumulative Impact Analysis which spans 83 linear miles along Long Island's south shore; in addition to a number of related ecological field studies including:

- Beach seining
- Trawling
- Benthic grab sampling
- Submerged Aquatic Vegetation (SAV) mapping
- Mapping of wetlands and terrestrial communities

EEA's tasks included site reconnaissance, data collection, data analyses, preparation of narratives and public presentation concerning the Existing and Affected Environment and Environmental Impacts. The natural resources components addressed include benthic invertebrates, finfish, Essential Fish Habitats, marine mammals, avifauna, barrier island flora and fauna, significant habitats, wetlands, submerged aquatic vegetation, and rare and endangered species.

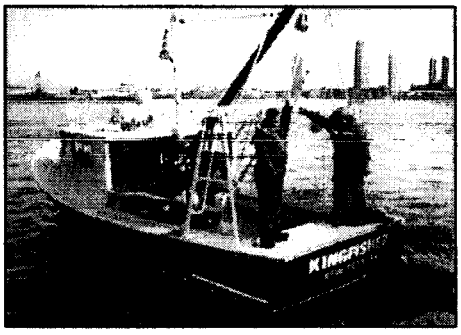
Storm Damage Reduction Reformulation Study: Mitigation Screening Data Gap Analysis/Interim Progress Memorandum

EEA prepared impact assessments of mitigation alternatives related to the EIS Biological and Water Quality components. Descriptions were provided for the recommended ecological mitigation measures (e.g. artificial reefs, wetland restoration/creation, plant material propagation, etc.).

EEA compiled a comprehensive bibliography of published and gray literature regarding natural resources of Long Island's offshore to intertidal marine environment, barrier islands, coastal ponds, and embayments. As part of the process, local, state and federal agencies and natural resources organizations were contacted concerning documented historic and current ecological studies. The bibliography supports a broader Data Gap Analysis effort, which spearheaded future studies.

ROOSEVELT ISLAND TIDAL ENERGY STUDY

Client: Verdant Power



EEA has been working with Devine Tarbell and Associates and BioSonics on a renewable energy project located in the East River. Underwater turbines will be placed on the floor of the East River and used to produce energy for Roosevelt Island in New York City. Fisheries studies were conducted in the project area using Hydro acoustics and bottom trawls. Hydro acoustic data was compared to fish catches to compare targets to capture by trawl. The preliminary six month study was conducted in response to agency concerns and will be continued after the turbines are in place to assess the finfish populations utilizing the project area.

ENVIRONMENTAL MONITORING FOR A CROSS BAY ELECTRIC TRANSMISSION CABLE

Client: KeySpan Energy

During 2003, EEA staff assisted KeySpan Energy during the planning and installation of a cross Great South Bay electric transmission cable from East Islip to Ocean Beach, NY. Specifically EEA planned and conducted the environmental program, which included water quality measurements for 23 consecutive days along the six mile route. A report was produced and submitted to the client and to the regulatory agencies.

DSNY SOLID WASTE MANAGEMENT PLAN

Client: New York City Department of Sanitation

EEA is one of the environmental consulting firms involved in the New York City Department of Sanitation Solid Waste Management Plan and responsible for writing the marine biological natural resources section of the Environmental Impact Statement (EIS) for this project. The Department is planning to restore and modify solid waste transfer operations at all eight of the Marine Transfer Stations (MTS). Due to the planned over-water construction, EEA assessed the existing marine biological resources around the MTS to compile baseline data at each MTS. Biological monitoring consisted of:

- Trawls and Gill Nets for adult finfish,
- Plankton Net tows for ichthyoplankton,
- Benthic Grabs for benthic invertebrates,
- Benthic Grabs for sediment quality,
- Colonization Plates for epibenthic colonization, and
- Water Quality Monitoring

at all eight MTS throughout 2003. The results of the dataset were compiled into a document that will be used to support Essential Fish Habitat (EFH) studies and an Environmental Impact Statement (EIS) for this project.

USE STANDARDS AND ATTAINMENT PROJECT

Client: New York City Department of Environmental Protection

EEA conducted a comprehensive marine-sampling program throughout New York Harbor and all major tributaries, as a technical sub-consultant to HydroQual, Inc. The goal of the study was to improve harbor-wide recreational fishery resources and public access. The sampling protocol included:

- Sediment grabs for identification of benthic organisms;
- Gill nets and otter trawls for finfish identification;
- Icthyoplankton tows to determine local spawning populations; and
- Settling plates for epibenthic organisms

in New York Harbor, Jamaica Bay, and tributaries to these water bodies. Water quality parameters (temperature, salinity, dissolved oxygen, and Secchi depth) were also monitored.

LONG OUTFALL FEASIBILITY STUDY

Client: New York City Department of Environmental Protection

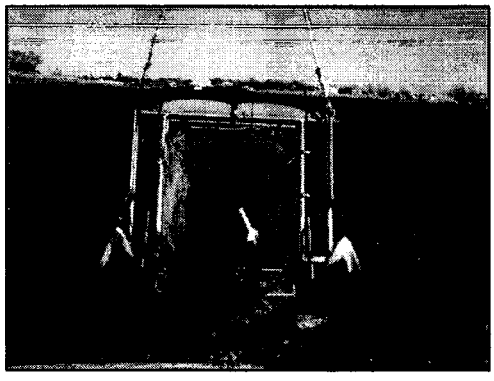
► Development and Feasibility Evaluation

EEA, as technical subconsultant to Hazen and Sawyer, participateed in a feasibility analysis of various alternative water pollution control plant (WPCP) discharge locations as a means of achieving water quality standards. The objective of the project is to assess whether outfall relocation is an acceptable alternative to attain higher levels of wastewater treatment.

► Critical Habitat Assessment

EEA conducted Critical Habitat Assessments (CHA) for Rockaway Inlet, Jamaica Bay, and offshore areas of Rockaway Beach. EEA submitted a literature review and identified all target/rare species, existing habitat conditions, natural resources, and life history information for marine and terrestrial communities, including: commercially important finfish and shellfish, EFH species, avifauna, marine mammals, SAV.

► Jamaica Bay Ecosystems Studies



EEA conducted a two and a half year study of the ichthyoplankton and adult finfish populations in Jamaica Bay. The project was funded by the New York City Department of Environmental Protection if efforts to improve water quality in Jamaica Bay. Adult finfish and ichthyoplankton were collected throughout the Bay, in a variety of habitats, with a wide range of water quality conditions and dissolved oxygen levels. Adult finfish and ichthyoplankton were collected using:

- Trawl nets for adult finfish
- Plankton nets for pelagic eggs and larvae
- Epibenthic sled for winter flounder eggs

Comparisons were made between populations collected in healthy and impaired sections of the Bay. EEA also assisted in the water quality, benthic, porewater, and Sub-bottom Profiling Imagery (SPI) sampling. EEA vessels, captains, and crew were used throughout the entire project in all sampling efforts. Reports were submitted to the NYCDEP in order to help them assess the health of the Bay and improvements that could be made.

EAST RIVER LANDING AQUATIC ENVIRONMENTAL STUDY
Client: New York City Public Development Corporation

EEA was contracted in the mid 1980s to evaluate environmental feasibility of constructing a mixed-use development on a 23-acre platform (on pilings) in the East River between the South Street Seaport and the Wall Street Heliport. The potential impacts of the large platform on the striped bass population was of particular concern in obtaining Corps of Engineers' permits. To assess the impacts of a large platform on fish populations, EEA designed and conducted a 21-month aquatic environmental survey in the East River in the vicinity of Pier 17, between the South Street Seaport and the Wall Street Heliport. A comparative study was implemented for the under-pier and inter-pier environment. Hydro acoustical analyses to determine three-dimensional movement of fish, as well as specially designed sampling gear were applied to determine the fisheries populations at the study site. The effects of the platform on fish populations were assessed. Remotely controlled video underwater cameras were also utilized. Other parameters investigated included: benthic invertebrates, invertebrate colonization, ichthyoplankton, water quality, bathymetry, hydrology, sedimentation, sediment chemistry and light transmission. An assessment of the expected impacts of a large platform on piling structure were made.

HUDSON RIVER CENTER SITE AQUATIC UNDERPIER ENVIRONMENTAL STUDY
Client: New York City Public Development Corporation

In the late 1980s, the Hudson River Center Development was proposed to be constructed on platforms extending into the Hudson River. An important aspect of that study was to determine the impacts, if any, of platforms on aquatic populations in the Hudson River. Considerable attention was given to sampling the underpier area and specialized sampling equipment had to be designed. To assess the potential impacts of the large platform based development, the effects of the five-acre Pier 76 were studied as a model. This aquatic ecology study was implemented in the Hudson River in the vicinity of Pier 76, between 34th and 40th Streets. This first-of-its-kind study determined the interpier and underpier fisheries population. Methodologies included:

- Interpier and underpier trawling from inflatable raft,
- Fish trapping,
- Benthic grabs for benthic invertebrates and sediment chemistry,
- Colonization plates for invertebrate colonization, sediment chemistry,
- And data collection for water quality, bathymetry, hydrology, sedimentation and light transmission.

The results of these assessments also were the subject of great interest in evaluating waterfront development impacts. Results of the program were submitted to professional statisticians for comparison of the interpier-underpier data. No significant differences were found.

PREPARATION OF AN ARTICLE VII APPLICATION FOR THE PROPOSED OFFSHORE WIND PARK

Client: KeySpan Energy

EEA was contracted by KeySpan Energy to prepare an Article VII Application for the Offshore Wind Park Interconnection to be submitted to the Public Service Commission. EEA conducted field studies of the marine environment in Great South Bay and terrestrial environment on both Jones Island and the mainland along proposed transmission cable routes. Field Studies included:

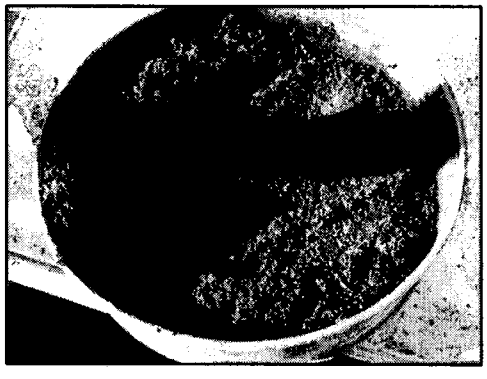
- Mapping of Submerged Aquatic Vegetation (SAV) beds near proposed routes
- Mapping of hard clam beds near proposed routes
- Benthic and sediment survey along three proposed transmission corridors
- Sediment sampling and vibratory coring along preferred route
- Current survey along preferred route
- Mapping of wetlands and terrestrial vegetation
- Avifauna and wildlife field survey

The results of the field studies were complimented with a literature review and assembled in text form for the Article VII Application and supporting exhibits.

PREPARATION OF MAJOR SECTIONS OF A FERC FILING FOR A PROPOSED UNDERWATER HIGH PRESSURE GAS TRANSMISSION PIPELINE

Client: Consortium; Long Island Lighting Company, Brooklyn Union Gas, East Texas Gas, Transcontinental Gas Company.

EEA staff scientists provided major environmental sections for a FERC Filing for a proposed new 38-mile high-pressure gas transmission pipeline from Raritan, NJ to the East Rockaway Generating Station. Besides conducting literature searches and assessing baseline data, EEA also conducted a sediment quality survey at 76 stations located along the proposed undersea route. Terrestrial ecology field studies were also conducted along an alternative corridor that cut across Staten Island before proceeding offshore. Field sampling methodologies included:



- Sediment grabs at 76 stations
- Terrestrial vegetative mapping
- Threatened and endangered species assessment

The FERC Filing was essentially completed but the project was terminated for financial reasons.

ENVIRONMENTAL AND SITING STUDIES FOR THE CREATION OF AN OFFSHORE ISLAND IN THE LOWER NEW YORK BIGHT

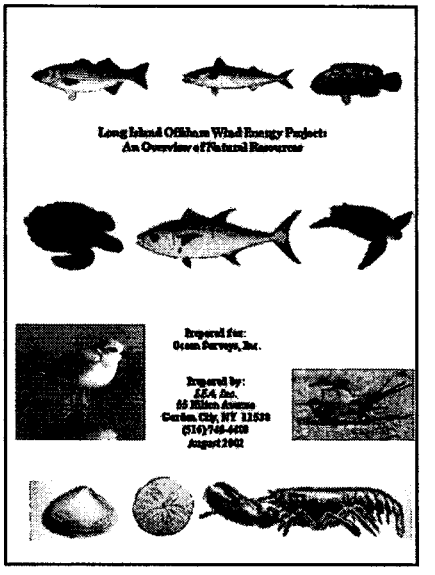
Client: Port Authority of New York and New Jersey (PANJNY)

During the early 1990's, EEA Senior Scientists were requested by PANYNJ for a conceptual assessment, then confidential, exploring the environmental and permitting ramifications of the creation of a large offshore island in the lower New York Bight. EEA staff scientists devised a project strategy that first assessed the Bight in terms of a number of features including oceanography, bottom (sediment) types, natural resources including commercial and recreational fisheries, dredge disposal sites, navigational channels, prevailing winds and potential for artifacts such as wrecks. After all the information was compiled exclusion areas for island construction were identified and the remaining zones characterized for feasibility. Permitting jurisdiction was identified and an assessment made of the overall probabilities of preparing a successful EIS and related permits.

DESKTOP STUDY OF THE MARINE ENVIRONMENT FOR LONG ISLAND POWER AUTHORITY'S OFFSHORE WIND ENERGY PROJECT – PHASE 1.

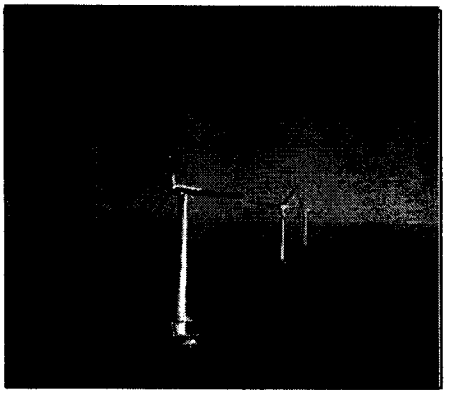
Client: Long Island Power Authority

EEA, as part of the Long Island Offshore Wind Initiative team, assessed natural resources and sensitive issues in the Atlantic Waters in a study for the siting of an offshore wind farm in the waters off Long Island. The assessment addressed existing resources and potential concerns regarding finfish, including commercial and recreational finfish; marine invertebrates and mammals; avifauna; herpetiles; artificial reefs; surf clams and the U.S. Army Corps of Engineers' use of proposed offshore sand borrow areas for beach nourishment. A second objective of the Phase 1 study was to narrow down the study area, which went from Montauk Point to Long Beach, and select a smaller zone for more intensive analysis. Ultimately, the zone selected were the waters south of Jones Island.



OFFSHORE WIND ENERGY SYSTEM PERMITS REQUIRED & FEASIBILITY EVALUATION – PHASE 2

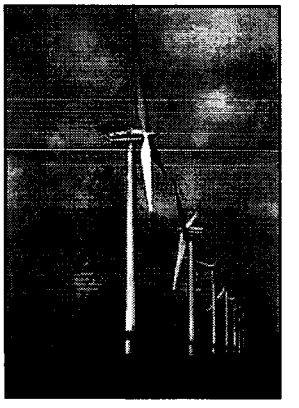
Client: Long Island Power Authority



EEA conducted a permitting feasibility assessment of the proposed offshore wind energy system planned for the waters south of Jones Island. The assessment focused upon permitting issues regarding marine waters, wetlands, water quality, effluent discharge to surface water, water supply and wells, coastal erosion, coastal issues, fish and wildlife, aviation and air space, and the requirements for the preparation of an EIS under NY State Environmental Quality Review Act (SEQRA). Facility and site design modifications were identified to facilitate state and federal agency approvals.

DESKTOP STUDY OF NEW JERSEY'S MARINE ENVIRONMENT FOR ATLANTIC RENEWABLE ENERGY CORPORATION'S OFFSHORE WIND ENERGY PROJECT

Client: Atlantic Renewable Energy Corporation



EEA, working for AWS Scientific, assessed natural resources and sensitive issues in the Atlantic Ocean and Delaware Bay in a desktop study for the siting of an offshore wind park in the waters off New Jersey. The assessment addressed existing resources and potential concerns regarding finfish, including commercial and recreational finfish; marine invertebrates and mammals; avifauna; herpetiles; artificial reefs; surf clams and the U.S. Army Corps of Engineers' offshore sand borrow areas for beach nourishment.

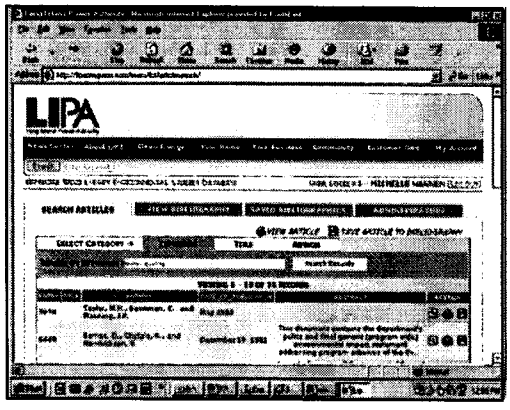
DESKTOP STUDY OF DELAWARE'S MARINE ENVIRONMENT FOR BLUEWATER WIND'S OFFSHORE WIND ENERGY PROJECT

Client: Bluewater Wind

EEA, working for Ocean Surveys, Inc., assessed natural resources and sensitive issues in the Atlantic Ocean and Delaware Bay in a desktop study for the siting of an offshore wind park in Delaware's waters. The assessment addressed existing resources and potential concerns regarding finfish, including commercial and recreational finfish; marine invertebrates and mammals; avifauna; herpetiles; and oyster beds in the Delaware Bay.

OFFSHORE WIND ENERGY DATABASE – COMPILATION OF EUROPEAN STUDIES ON EXISTING FACILITIES AND BASELINE INFORMATION ON SITE CHOSEN FOR LONG ISLAND'S OFFSHORE WIND ENERGY PROJECT

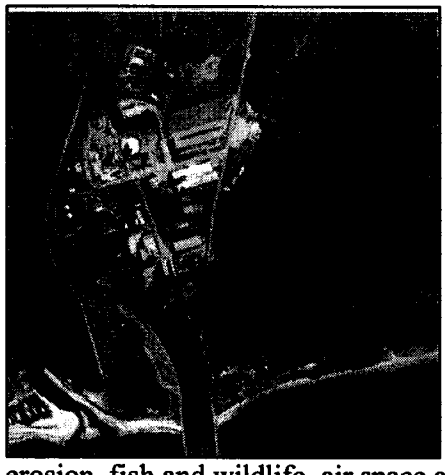
Client: Long Island Power Authority



EEA has compiled over 900 documents related to offshore wind energy and baseline environmental data on the site chosen for the Long Island Offshore Wind Energy Project. The documents, including: European environmental reports, Environmental Impact Assessments, support structure information, wind data prediction, biological data from Long Island, and local newspaper articles and community outreach information, have been incorporated into the database. This database has been used for background information in several Environmental Impact Statements and natural resource assessments.

WASTE TO ENERGY FACILITY:
MARINE PERMITTING REQUIREMENTS AND FEASIBILITY EVALUATION AT THE SHOREHAM SITE

Client: American Ref-Fuel



The purpose of this evaluation was to identify the non-air permits required and to assess the likelihood of obtaining permits for a waste to energy facility utilizing a closed cycle cooling system located on Long Island, New York. AMR's plan was to utilize the Shoreham Facility to locate an Enclosed Barge Unloader Facility (EBUF) to unload barges containing 2,000 tons per day of New York City Mixed Solid Waste (MSW). The waste would be burned in a newly built waste to energy facility producing up to 140 MW of power. EEA's assessment focused upon marine resources, dredging, impingement and entrainment concerns, wetlands, water quality, solid waste, effluent discharge to surface water, water supply and wells, coastal erosion, fish and wildlife, air space and aviation, navigation and an overall EIS preparation according to NY SEQRA. The project also involved the identification of site layout and design features assistance that will facilitate agency approval of the project.

EEA, *Inc.* owns and operates two research vessels

R/V Kingfisher: 36' Stanley Brothers Marine Lobster Boat

R/V Cormorant: 26' Steiger Craft

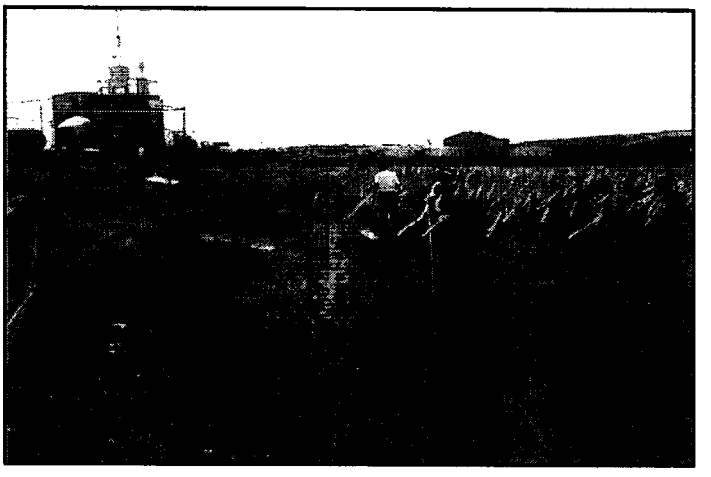
EEA, *Inc.*

Tidal Wetlands Qualifications

EEA, *Inc.* has extensive experience in designing and overseeing the restoration and construction of wetlands throughout the metropolitan New York area and Long Island, as well as assessing marine, wetland, and terrestrial impacts for NEPA, SEQRA, and CEQR EISs, and Essential Fish Habitat (EFH). EEA's expertise spans all aspects of freshwater and tidal wetland assessments and restoration, including landscape design, wildlife surveys, rare species assessments, ecological inventories, GIS mapping, wetlands delineations, marine studies, vibratory coring, planning, invasive species management, permit applications, and ecological monitoring.

FRESH KILLS LANDFILL WETLAND CREATION

Client: NYS Department of Sanitation

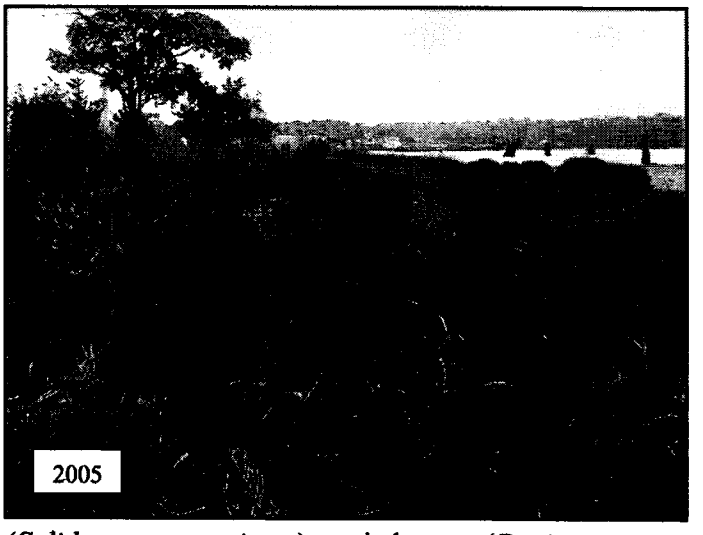


EEA recently completed a tidal wetland creation design, and wetland permit applications for the Staten Island Transfer Facility. This new truck-to-rail facility has been constructed north of Little Fresh Kill and Fresh Kills Creek within the Fresh Kills Landfill. The project entailed removal of approximately 10 feet of mixed refuse from the landfill shoreline; and the creation of a 3.1-acre tidal wetland with maritime shrub and grassland plantings in the adjacent area. This represented a 4.5:1 mitigation ratio for anticipated losses associated with construction of the proposed railway crossing and installation of stormwater filtration devices. The wetland installation is presently underway. EEA is currently providing oversight of the wetland planting EEA conducted this work for the New York City Department of Sanitation as a technical sub-consultant to HDR Engineering.

HEMPSTEAD HARBOR TIDAL WETLAND RESTORATION

Client: Pillsbury, Winthrop, Shaw & Pittman, LLP

EEA designed a wetland restoration plan for a 5-acre tidal cove located on the south side of the Town of North Hempstead's Bar Beach Park. This restoration has been completed as off-site mitigation for a required cleanup of the Shore Realty Superfund site located on the opposite shoreline of Hempstead Harbor. EEA prepared the construction bid documents, the detailed wetland restoration plans & specifications, and obtained the wetland permits. The project was partially funded through a NOAA/NMFS community assistance grant, with in-kind support from the Town of North Hempstead. EEA conducted construction inspection, and assisted with on-site training and overseeing the volunteers through the completion of the planting phase.



This wetland restoration project was recognized in the USEPA's 2003-2004 Long Island Sound Study Biennial Report as a highly successful community based project that set the stage for future tidal wetland restoration efforts throughout Hempstead Harbor. The restoration plan provided a mixture of warm season grasses in the upland along with a maritime shrub community; a spring tide zone consisting of seaside goldenrod (*Solidago sempervirens*), switchgrass (*Panicum virgatum*), and coastal panicgrass (P. a*marulum*); a mixture of saltmeadow cordgrass (S*partina patens*), spike grass (*Distichlis spicata*) and black grass (*Juncus gerardi*) in the high marsh zone; and smooth cordgrass (*Spartina alterniflora*) in the intertidal zone.

EEA, *Inc.*

MATTITUCK CREEK WATERSHED ANALYSIS
Client: Town of Southold Board of Trustees

EEA prepared a watershed analysis plan for Mattituck Creek in cooperation with the Suffolk County Soil and Water Conservation District. The watershed management plan defined the watershed boundary, examined the potential point and nonpoint pollutant sources, and estimated the loading rates for each of the contributing sub-watersheds. Best management practices to address soil erosion, stormwater runoff, wetland creation, plantings and habitat improvements were recommended for problem areas and overall conditions and assigned priority rankings.

NEW YORK BOTANICAL GARDEN - TWIN LAKES RESTORATION
Client: New York Botanical Garden, Bronx New York

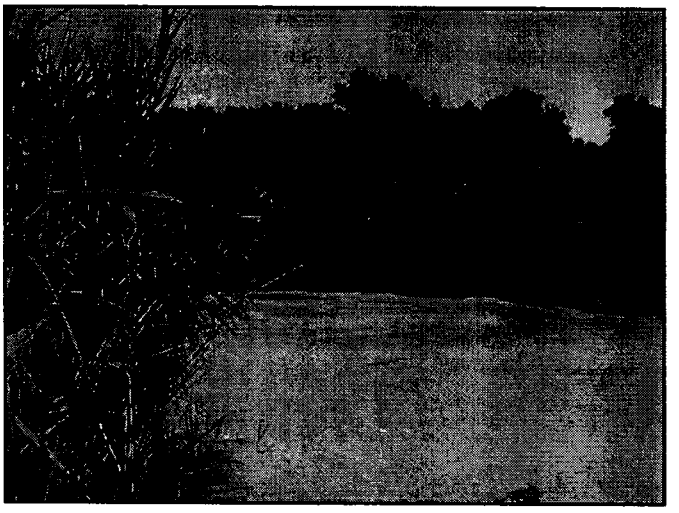
EEA conducted watershed investigations, wetland delineations, and ecological assessments of the Twin Lakes as a sub-consultant to Parsons Brinckerhoff. EEA's tasks included: ecological community mapping of the Twin Lakes watershed area; developing and completing a water and sediment sampling program to determine possible chemical pollutant conditions in the lake system; and conducting geotechnical borings and hydro-geological evaluations of aquifer contributions to the lake system.
Field surveys included:

- Field wetland delineation using Trimble GeoXT GPS Unit
- Watershed boundary delineation using Trimble GeoXT GPS Unit
- Inventory of Flora and fauna within the watershed
- Mapping of ecological community types
- Water quality sampling using YSI 85 meter
- Benthic grabs for sediment sampling

EEA also assisted in obtaining wetland and dredging permits from the NYSDEC and US Army Corps of Engineers.

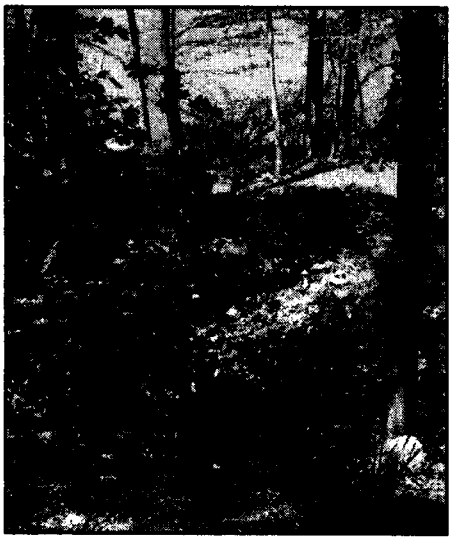
SCUDDER'S POND SUBWATERSHED PLAN

Client: Hempstead Harbor Protection Committee



EEA prepared a subwatershed management plan for Scudder's Pond. An ecological inventory was conducted in the watershed that identified the natural community types, vegetation growing within the pond and tributary wetlands, wildlife use, and areas of disturbance. The subwatershed plan defined the subwatershed boundary, identified nonpoint pollutant sources, and pollutant loading rates; identified best management practices to reduce nonpoint source pollution. Schematic design plans and a phased implementation schedule were prepared. In support of the plan, EEA scientists conducted an ecological and drainage inventory of the subwatershed and sediment core sampling of Scudder's Pond for laboratory analysis.

NEW YORK STATE DEPARTMENT OF TRANSPORTATION SPDES MS4 OUTFALL MAPPING



Client: NYSDOT Regions 8, 10 and 11

Reference: Manny Beigelmacher, Munoz Engineering, (212) 967-6588

As a wetland subconsultant to Munoz Engineering, PC, EEA provided daily field support to the ground survey crews locating stormwater outfalls along all state routes in Westchester, Rockland, and Ulster Counties. EEA assisted with outfall characterization and identification of federal wetlands. EEA participated in all NYSDOT progress meetings, prepared a Visual Wetland Identification Guide for use by the field crews, and provided in-field training.

MASTER PLAN FOR WEST MEADOW BEACH RESTORATION

Client: Town of Brookhaven

The Town of Brookhaven has removed over one hundred seasonal cottages along the western shoreline of Smithtown Bay, in an effort to: enhance wildlife habitat for piping plover, least tern, common tern and diamondback terrapin; and to improve public passive recreational opportunities at West Meadow Beach. EEA has completed the following tasks for this park restoration project, as an ecological subconsultant to Cameron Engineering: conducted flora and faunal surveys of the project site; wetland delineation and marine characterization of West Meadow Creek; identified the rare species and ecologically sensitive areas on the project site; mapped the natural communities; provided the routing plan for an interpretive trail system; and developed recommendations for long-term invasive species control and vegetative restoration.

Field techniques and equipment used for the survey include:

- Deployment of seine nets for finfish and macrobenthic communities
- Delineation using Trimble GeoXT GPS Unit
- Water quality sampling using a YSI 85 meter
- Invasive species mapping using Trimble GeoXT GPS Unit

EEA, *Inc.*

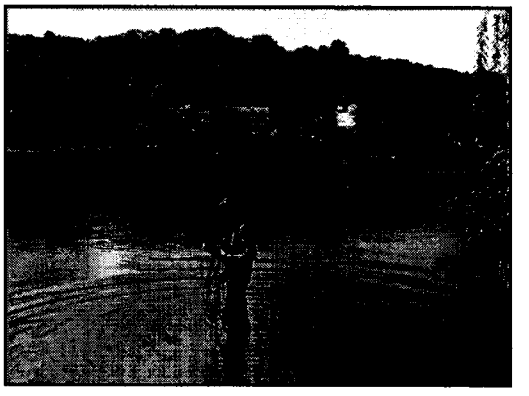
EVALUATION OF POTENTIALLY SENSITIVE HABITATS, KEYSPAN JAMESPORT SITE

Client: KeySpan Corporation Purchasing Department

In July 2002, EEA began a focused terrestrial ecology survey on a 546-acre waterfront tract located on Long Island Sound in Jamesport, NY. The property was historically acquired by the Long Island Lighting Company for potential construction of a nuclear power station. KeySpan's goal for conducting this study was to develop future management and/or disposition plans for the property. The primary objectives of the survey were two-fold: to identify portions of the property with no environmental constraints for future development potential; and conversely, to identify and prioritize ecologically sensitive and worthy preservation areas. EEA's survey targeted rare species (endangered, threatened, and species of special concern), major vegetative communities, wildlife, agency regulated and non-regulated wetlands, and coastal erosion hazard areas. In October 2002, based upon the guidance provided by EEA's report, KeySpan effectively negotiated an agreement with the New York State Office of Parks, Recreation, and Historic Preservation to set aside 200 acres bordering the Long Island Sound for a new state park.

MILL & ROSLYN POND PARK: POND RESTORATION, WATER QUALITY IMPROVEMENT AND HABITAT ENHANCEMENT

Client: Town of North Hempstead



The goals of the project are to identify alternative treatments and phased water quality improvements, habitat enhancement, and wetland restoration for these pond systems and the adjoining park parcels. EEA scientists conducted ecological inventories of the sub-watersheds contributing to these pond systems, finfish seine surveys and sediment core sampling for laboratory analysis. Field techniques applied include:

- Beach seining for forage fish
- Vibratory coring for sediment analysis
- Water quality measurements using a YSI 85 meter
- Wetland delineation and mapping using a Trimble GeoXT GPS Unit

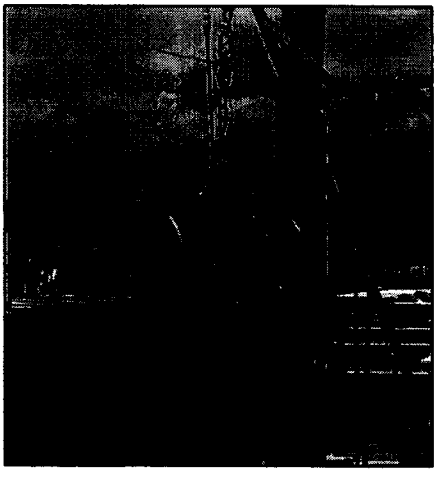
EEA also prepared the wetland permit applications for this project. EEA completed this work for the Town of North Hempstead as a technical sub-consultant to Cameron Engineering.

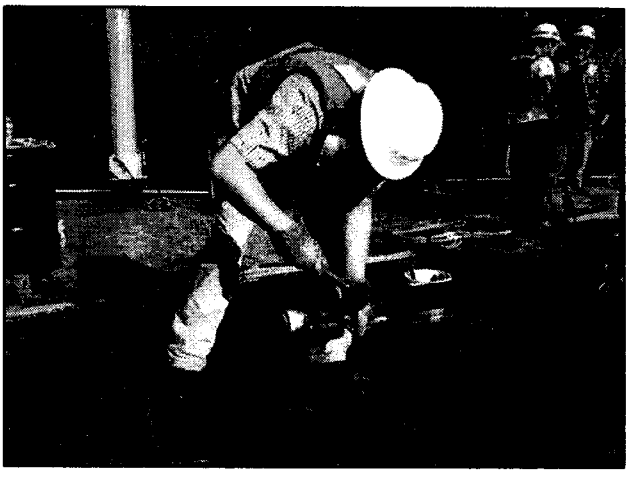
Sediment Testing and Vibracoring Qualifications

EEA, Inc. is one if the few environmental consulting firms that has extensive experience in addressing sediment management plans including: study design, sampling, analysis, and interpretation of results. Past sediment testing projects have been conducted for New York City, New York State and other states, Federal Agencies, and private clients including Chevron Products Company and Great Lakes Dredging. EEA has also provided dredge material consulting to the Port Authority of New York and New Jersey.

EEA has undertaken numerous sediment management studies over the past fifteen years. Services included delineating contaminated sites, creation of wetlands using dredged material, landfill cover, and upland disposal. EEA maintains state-of-the-art vibratory coring equipment including Rossfelder P-1 electric, pneumatic, and mechanical vibratory corers, hand corers, piston corers, split spoon augers, drop hammers, and a Geoprobe LT54 direct push corer sampler. Some of EEA's sediment testing and vibracoring projects are detailed below.

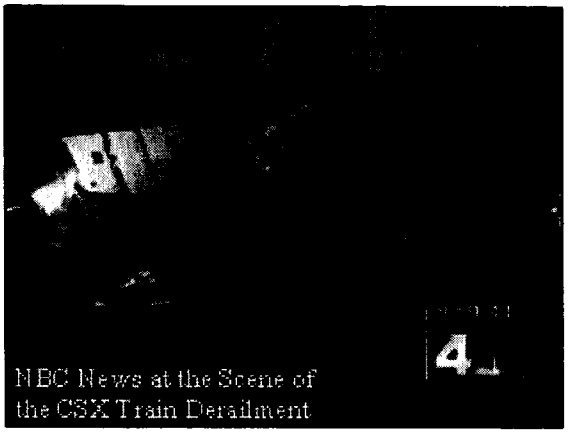
Many of EEA's sediment analysis and vibracoring studies required environmental permitting. Various permitting experience includes: NYSDEC Tidal Wetlands Permits, Water Quality Certifications, and Coastal Erosion Hazard Areas, USACE Clean Water and River and Harbor Acts; NYSPSC Article VII; and NYSDOS Coastal Consistency Review.



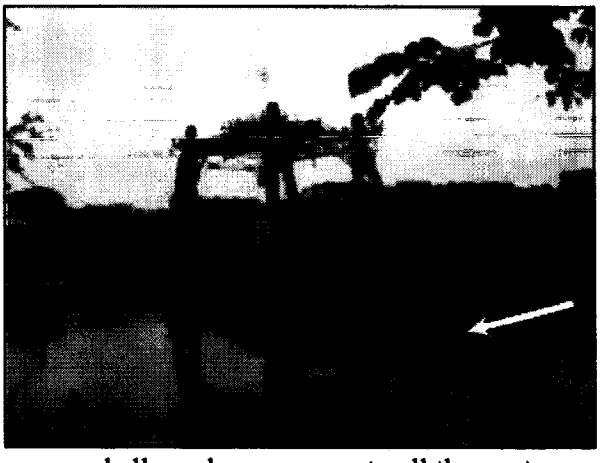


ANACOSTA TRAIN DERAILMENT RAPID RESPONSE
Client: District of Washington Department of the Environment

Concern was raised immediately by the District of Washington Department of the Environment (DOE), and other regulatory agencies, as to the suspension of highly toxic sediments into the water column during the initial train wreck, and then, the potential re-suspension of the sediments during removal and excavation of the submerged cars and spilled coal. Sediment testing had to be done quickly and before the cars were removed from the scene.



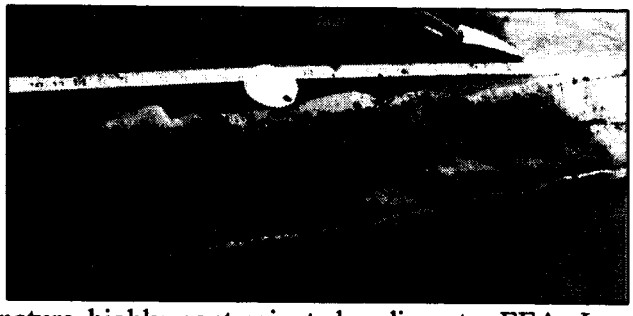
EEA's previous work on various Army Corps of Engineer's projects from Maine to Georgia led to an urgent call late Sunday night that our vibratory coring services would be required to delineate existing sediment conditions and help determine the potential spread of highly toxic sediments.



While two other contractors were called to the scene to respond, EEA was able to rapidly conduct all field sampling and coordinate the laboratory testing. EEA mobilized our 24-foot Carolina skiff and our electrically powered Rossfelder P-1 vibratory corer for this project. The skiff was chosen because of its portability and the ability to remove the entire pilot house in less than 1 hour. The shallow draft and low overhead clearance with the pilot house removed allowed easy access to all the upstream sampling locations with passage under the overhanging trains on the collapsed bridge.

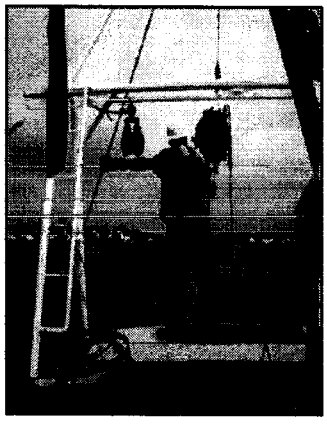
EEA collected over 40 vibratory cores at all the predetermined locations both upstream and downstream of the train wreck during one 20-hour workday. The sediment core samples were logged, subsampled and rushed for immediate laboratory analysis. DOE and assisting agencies monitored the water quality as they prepared for the removal of the freight cars. See the links below for more on the train derailment.

NEW BEDFORD HARBOR PCB SUPERFUND SITE
Client: Foster Wheeler / USEPA



As a subcontractor to Foster Wheeler, Inc., EEA completed over six hundred vibratory and gravity cores in the New Bedford Inner and Outer Harbors during the past several years to assist in delineating the PCB contamination hot zones and to map the vertical and horizontal PCB concentrations throughout the Harbor. Due to the nature highly contaminated sediments, EEA, Inc. designed and modified one of our coring systems to collect and contain sediments with free product with minimal sample loss.

CHEVRON REFINERY- PERTH AMBOY, NEW JERSEY
Client: Chevron, Inc.



As a prime contractor to Chevron, EEA, *Inc.* has completed numerous vibratory core sampling and sediment analysis programs at the refinery over the past ten years. EEA was responsible for developing and implementing the vibratory coring program to characterize the recently deposited sediments at the Barge and Tanker berthing facilities on the Arthur Kill on several occasions. The scope of work included a complete sediment characterization study including elutriate testing, bioassay, and amphipod toxicity testing. EEA, *Inc.* was also responsible for collecting over two hundred sludge pond and lagoon core samples used to characterize and evaluate sediments prior to a RCRA closure.

PORT OF RICHMOND, VA – TURNING BASIN ENLARGEMENT
Client: USACE – Norfolk District

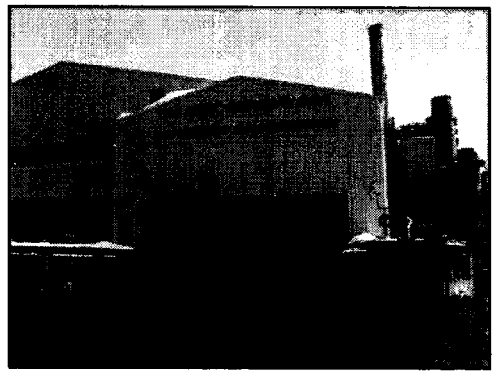
EEA, Inc. was requested by the Norfolk District of the USACOE to develop and implement a sampling program to determine the physical and chemical sediment quality on the Elizabeth River at the Port of Richmond. EEA designed, modified and constructed a pneumatic coring system capable of collecting a continuous 30-foot long core sample in water depths in excess of 50 feet. Due to transportation problems with a 30-foot core barrel, EEA constructed the extended length barrel on board the USACE R/V Elizabeth for this sampling program. EEA routinely performs maintenance dredging sampling programs for the Norfolk District.

TANGIER ISLAND, CHESAPEAKE BAY, VA
Client: USACE – Norfolk District

EEA, Inc was requested by the Norfolk District of the USACE to assist in the development and implementation of a sampling program designed to determine the geotechnical suitability of the marine sediments along the rapidly eroding windward side of the island to support a stone revetment or wave breaks to dissipate hurricane and gale force wind driven waves. EEA was required to collect and preserve, continuous 20-foot sediment core samples for geotechnical and chemical analysis. Some cores were collected in less than 24 inches of water.

Tangier Island is located in the middle of the Chesapeake Bay between Maryland and Virginia and has a maximum elevation of 5' above sea level. It is a significant historical and environmental resource to the bay. The resident fishermen on the Island provide approximately 50% of the total blue crab catch landed in the Chesapeake.

SEDIMENT CHEMISTRY COLLECTION AT MARINE TRANSFER STATIONS/ FRESH KILLS SEDIMENT CORING AND CHEMISTRY NEW YORK HARBOR
Client: NYC Department of Sanitation



EEA conducted a large scale sampling program at Fresh Kills Landfill and eight Marine Transfer Stations in New York City. EEA implemented the study design, field sampling, interpretation of results, and assisted in permit preparation. The staff took a total of 82 cores at Fresh Kills for this program with core depths from 3 feet to 18 feet. Staff also made sediment chemistry collections at all of the MTS facilities located within New York City. EEA was responsible for sample processing for the various protocols, which involved:

- Sediment grab sampling
- Vibratory coring
- Compositing and splitting the cores for analyses

Samples were analyzed for metals, priority pollutants, elutriate, site water, PCBs and grain size.

SEDIMENT CHEMISTRY ANALYSIS FOR DEWATERING BASINS
Client: Great Lakes Dredging Company, Staten Island, NY

EEA was retained by Great Lakes Dredging Company to sample a series of dredge material dewatering basins utilized by New York City. The project involved: study design, protocols, regulatory liaison, field sampling analysis, and report writing. Field sampling included:

- Sediment grab sampling
- Vibratory coring
- Compositing and splitting the cores for analyses

The project was completed on time and under budget. The results showed that dredge material from Fresh Kills Creek could be utilized as daily cover at the Fresh Kills Landfill.

TECHNICAL CONSULTATION ON DREDGED MATERIAL PROGRAMS
Client: NYC Department of Sanitation

EEA principal scientists provided technical support services for the Dredged Spoil Disposal Program for the Department of Sanitation. This support included periodic evaluation and critiques of the USACE "New Guidance Manual." Specifically, research was conducted on the appropriateness of required Method Detection Limits (MDLs) contained in the New Guidance and the practicality of implementing the methodologies. Information was gathered by interviewing senior scientists at a number of analytical and bioassay laboratories.

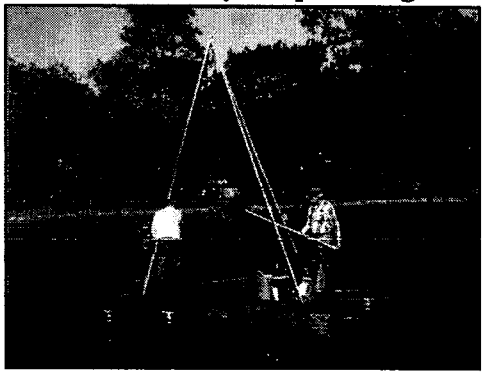
TECHNICAL CONSULTATION AND QUALITY ASSURANCE SERVICES
Client: NYC Department of Sanitation

EEA principal scientists, in association with HydroQual, provided technical support services for the Leachate Mitigation Program at Fresh Kills. This support included evaluation of the findings and reports conducted by the prime contractor and consultation with DSNY staff about the overall direction of the program. At times, EEA / HQI scientists also monitored field programs for adherence to project protocols.

PORT AUTHORITY VIBRATORY CORING STUDIES
Client: Port Authority of New York and New Jersey / EA Science Engineering and Technology

EEA, *Inc.* has performed numerous vibratory coring surveys to assist the Port Authority in developing dredging plans in and around Howland Hook Marine Terminal, La Guardia Airport, and various other Port Authority owned/operated facilities along the Hudson and East Rivers, the Arthur Kill, and the Kill van Kull. Sediment sampling was completed to determine physical and chemical characteristics for disposal management.

SCUFFLETOWN CREEK, NORFOLK VIRGINIA
Client: U.S. Army Corps of Engineers/Foster Wheeler, Inc.



EEA, Inc. has developed a portable vibratory coring system, which can be readily deployed on hired vessels throughout the United States. EEA recently mobilized a coring system and crew to assist Foster Wheeler to collect sediment samples, which were used to further define limits of contamination from a specific point source within Scuffletown Creek. The Carolina Skiffs and rafts used have shallow drafts (< 1 foot) and low overhead clearance for access under low bridges, which is ideal for use within the Berry's Creek System.

FRESHWATER WETLAND CREATION USING DREDGED MATERIAL
Client: NYC Department of Sanitation

Under contract to the New York City Department of Sanitation, EEA developed a concept of using dredged sediment material as a substrate for the creation of a freshwater wetland. This plan provided the client with a number of significant advantages, including a unique and beneficial dredge material disposal option, creation of a wetlands mitigation bank, and the benefits of a "green project." EEA also developed a wetlands creation plan for stormwater control at an industrial facility in Newark, New Jersey.

BROOKLYN NAVY YARD
Client: Brooklyn NAVY Yard Development Corporation

The Brooklyn Navy Yard requested a feasibility study to determine if dredge material from their main basin could be used to fill in Wallabout Channel. This channel was not being used within the Navy Yard since the cessation of ship construction and repair. EEA scientists conducted:

- Fisheries studies using trawls
- Sediment grabs for sediment chemistry
- Vibratory coring
- Wetland delineations

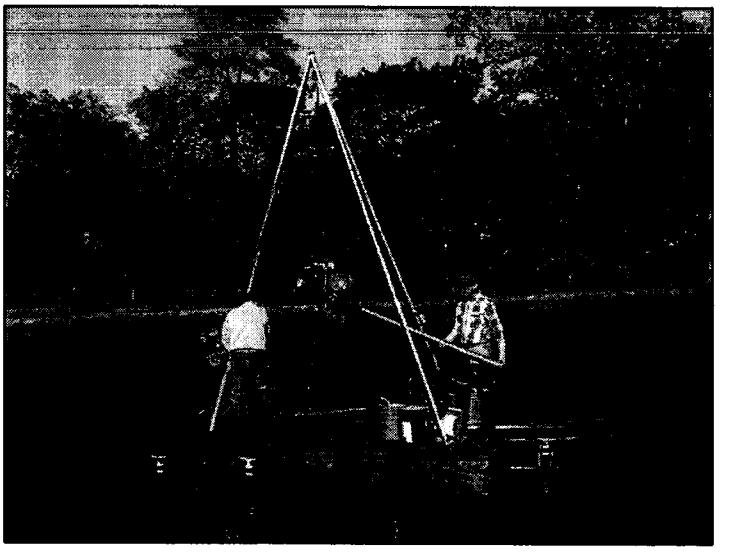
A permit application was also submitted.

DREDGED MATERIALS MANAGEMENT PROGRAM – DELAWARE RIVER, PA
Client: USACE – Philadelphia District

EEA, Inc. was selected with Versar Inc. to participate in the long term (five year) USACOE Philadelphia District Dredged Materials Management Program to supply personnel, equipment, vessels and expertise to support ongoing dredging project in the Philadelphia area. EEA Inc. supplies site specific equipment to collect sediment cores on an emergency and non- emergency basis through out the Philadelphia Districts' domain with the primary focus of sediment sampling on the Delaware and Schuykill Rivers.

EEA, *Inc.*'s vibratory coring vessels

19' and 24' Carolina Skiffs for shallow water access



Raft for shallow water access

EEA, INC. PARTIAL CLIENT LIST

Engineering Firms

Edwards & Kelsey
Frederic R. Harris
Greenman Pedersen
Hazen & Sawyer
HDR Engineering
HydroQual
IT Corporation
Law Environmental
Metcalf & Eddy
Parsons Brinkerhoff Quade & Douglas, Inc.
O'Brien & Gere
Ocean & Coastal Consultants, Inc.
Sealye Stevenson Value & Knecht
Stone & Webster Engineers
Urbitran Associates
URS Engineers
Vollmer Associates

Institutions/Utilities

Brooklyn Union Gas Co.
Consolidated Edison Co.
Empire State Electric Energy Research Corp.
Historic Hudson Preservation Foundation
Long Island Power Authority
Polytechnic University
The New York Hospital
Winthrop University Hospital

Business/Industry

American Ref-Fuel Co.
CBS Inc.
Chevron Products Company
Coca Cola Bottling Company
Destec Inc. (sub. of Dow Chemical)
IBM Corporation
Maxus Energy Corporation
Mobil Oil Corporation
Muss Development Corporation
Nabisco, Inc.
NYNEX Corporation
Olympia & York Realty
Public Storage, Inc.
Studley Realty Corporation
The Donald Trump Organization
The Home Depot
The New York Times
Transcontinental Pipeline Co.
W.R. Grace Company

Lenders

ABN Amro Bank
Bank Leumi Trust Company of New York
Bank of Tokyo
Carver Federal Savings Bank
Chase Manhattan Bank NA
Citibank
Consolidated Asset Recovery Corporation
Chrysler Credit Corp.
Deutsche Bank
European American Bank
Fleet Bank
HSBC Bank USA
New York City Financial Services Corporation/
Industrial Development Agency
New York State Medical Care Facilities Finance Agency
New York State Housing Finance Agency
Penn Mutual Life Insurance
Prudential Life Insurance
Roslyn Savings Bank
The Bank of New York
The Community Preservation Corporation
The Greater New York Savings Bank

Governmental

New Jersey Department of Transportation
New York City Department of
Environmental Protection (NYCDEP)
New York City Department of General Services
New York City Department of Ports and
International Trade
New York City Department of Sanitation
New York City Department of Parks and Recreation
New York City Economic Development Corporation
New York City Transit Authority
New York State Attorney General
New York State Department of
Environmental Conservation (NYSDEC)
New York State Department of Transportation
Port Authority of New York and New Jersey
Southwestern Connecticut Regional Planning Agency
Suffolk County Department of Health Services
Triborough Bridge & Tunnel Authority
U.S. Army Corps of Engineers
U.S. General Services Administration
Village of Bronxville
Village of Sea Cliff
Village of New Rochelle
Westchester County Department of Public Works

Resumes of Key Personnel

JEFFREY B. SHELKEY
SENIOR SCIENTIST

Education:
B.S., University of Massachusetts, 1975 - Natural Resource Management

Certifications:
OSHA 40-Hour Hazardous Materials Safety Training
OSHA 8-Hour Hazardous Materials Site Manager Training

RESPONSIBILITIES:

Senior Project Manager and Site Supervisor for Remedial Investigation/Feasibility Studies
Senior Project Manager for Remedial Action/Corrective Action Projects

EXPERIENCE:

Mr. Shelkey joined EEA in 1993 as Senior Project Manager. His responsibilities include technical and program management for long term multi-disciplinary environmental investigation programs. He has over thirty years experience performing and directing marine investigations in the United States and abroad. This work includes sediment investigations in riverine, estuarine and marshland environments. He has designed, built and operated innovative electrical, mechanical, and pneumatic high frequency vibratory coring systems for collecting continuous unconsolidated sediments samples for harbor, pond and hazardous waste lagoon dredging and closure programs. Mr. Shelkey has experience as a field biologist directing and conducting projects involving fisheries, icthio plankton, and benthic invertebrate sample collection and taxonomy. He is an experienced and licensed SCUBA diver with over 1,500 logged dives and currently holds an instructor rating with NAUI. He has directed numerous hazardous waste site remedial investigations, corrective action studies and designed and directed remedial action cleanup projects. His recent and relevant experience includes:

- Project manager responsible for directing all U.S. Army Corps of Engineers Philadelphia District, vibratory core sampling project under current three-year Basic Ordering Agreement.

- Project manager responsible for designing and directing numerous upland and extreme shallow water sampling projects for the U.S. Army Corps of Engineers Norfolk District This work has included sediment sampling in marshy and upland areas of the Anacostia River with challenging access issues and requiring innovative adaptation of sampling techniques. The proposed sampling program required the modification of the vibratory sampling equipment for portability and for sample collection through root and peaty depositional material.

- Project manager/Senior Scientist responsible for collecting over 10,000 sediment core samples from Maine to Florida for harbor and river dredging projects. Completed sample acquisition projects for numerous Army Corps of Engineers districts including New England, New York, Philadelphia, Norfolk, VA and Savannah, GA. Developed and implemented sediment collection techniques for petroleum, chemical and metal refineries. Other USACE projects have included work in the Port of Richmond, Tangier Island Beach Stabilization, MARAD Ghost Fleet Marine Facility, Upper and Lower James River shoaling, Scuffletown Creek Superfund Site, Virginia Beach, beach nourishment program, Willoughby Creek Dredging and others.

- Project manager responsible for directing all marine sediment sampling using vibratory coring and gravity coring techniques for the Chevron Products Company Refinery in Perth Amboy. He was responsible for directing all field sampling and data collecting activities and maintaining the QA/QC procedures. Collected over 300 cores at this refinery and shipping terminal for the barge berth, pier head dredging programs and the 10-acre waste lagoon closure.

- Project manager responsible for directing and performing the Alley Pond phragmites marsh sampling and assessment prior to the dredging and reconstruction of the Alley Pond at the Long Island Expressway/Cross Island Parkway interchange.

- Senior Scientist responsible for developing and implementing vibratory core sampling program used on channel maintenance dredge surveys for New York City Department of Sanitation at their Marine Transfer Stations. Collected over 150 vibratory core samples at their transfer and docking facilities to maintain existing permits.

- Project Manager for the 1.4 million dollar Remedial Investigation at the former Phelps Dodge Copper Refinery in Maspeth, Queens, New York. Was responsible for directing all on-site investigation activities, personnel training and scheduling, sample QA/QC, and final report preparation. Collected over 30 vibratory core samples for marine sediment analysis.

- Marine biologist/diver responsible for collecting benthic survey data for a proposed fish farm off Plum Island, New York. Deployed and recovered multilevel current meter arrays to obtain data for impoundment nets. Performed underwater video camera surveys of ocean bottom along predetermined transect lines for DEP permit.

- Designated as US Army Corps of Engineers Quality Assurance Officer to perform oversight on vibratory coring surveys for proposed dredging project in New England harbors, including Gloucester, Fall River, New Bedford, Bridgeport CT, and the Cape Cod Canal.

- Project manager responsible for directing and completing the vibratory core sampling and analysis programs for numerous local projects including:
    - Van Cortland Lake, Van Cortland Park, New York.
    - Alley Pond rehabilitation at the Cross Island and LIE Interchange
    - Scudders Pond at the North Shore Country Club, Sea Cliff, New York.
    - Twin Lakes at the Brooklyn Botanical Gardens, Bronx, New York.
    - Paerdegat Basin Channel Force Main Construction, Jamaica Bay, Brooklyn, New York.

- Field Biologist responsible for directing and collecting environmental data for proposed and existing nuclear power plants. Extensive experience with fisheries, icthio plankton, and benthic invertebrate sample collection and taxonomy. Worked extensively with otter trawls, beach seining, gill netting, conch and crab trapping to develop population meristics and dynamics for cooling water intake and discharge entrainment studies.

- Field Biologist responsible for the collection and taxonomic identification of fish and macro fauna for the U.S. ACOE Democrat Point to Fire Island Inlet Beach Reformulation Study. Performed fisheries, water quality and sediment sampling studies for borrow site development along the south side of Long Island.

- Senior Project and Site Manager directing the investigation and remedial action at the East River Tennis Club site on Vernon Ave., Queens, New York. The former City Oil Services Bulk Petroleum Storage Facility required excavation of over 100,000 cubic yards of heavily contaminated soil. All site work and closure testing was accomplished under a negotiated stipulation agreement between the NYSDEC and the Site owner. Was responsible for designing and installing a multipoint volatile organic and particulate monitoring network with radio uplinks to a remote warning system. Was also responsible for regulatory liaison between owner, contractor, and NYSDEC.

- Senior Project and Site Manager responsible for directing the 1.6 million dollar remedial investigation activities at the former Phelps Dodge copper refinery in Maspeth, Queens, New York. Supervised soil and groundwater investigations, meteorological and ambient air monitoring and vibratory coring operations.

Level of investigative effort was to assess environmental impacts to the site prior to acquisition by the New York City Department of Environmental Protection for use as a sludge management facility.

- Senior Scientist responsible for directing the hazardous material investigations for the City of New York, Department of Sanitation -- Draft Environmental Impact Statement for Revitalization of the Fresh Kills Landfill and city wide Marine Transfer Stations. Haz-Mat investigations included all private vendor proposed facilities and directing the environmental investigations for the demolition of three city owned MSW incinerators.

- Senior Project Manager responsible for the design, construction, installation, operations and maintenance of a high flow Soil Vapor Extraction system at the Cantor Brothers inactive hazardous site in Farmingdale, New York. The NYSDEC listed site is currently undergoing final closure testing in preparation for delisting.

- Senior Project Manager responsible for directing the Phase I and Phase II Site Investigation of the SEAMASS waste-to-energy facility in Rochester, Massachusetts, the CMW Landfill in Rochester, Massachusetts, an ash monofill, and the Falmouth Stump Dump Landfill in Falmouth, Massachusetts.

- Project manager of the East End Terminal fuel farm closure at LaGuardia Airport, which included closure of 26 underground storage tanks at Hangars 6 and 8, directing the subsurface remedial investigation for the recovery of free floating fuel product, supervising the design, installation, and operation of the product recovery system, and acquiring all necessary air and water discharge permits.

- Project Manager responsible for implementation and completion of a PCB spill cleanup at Maxwell House Coffee in Hoboken, New Jersey, including directing all sub-contractors and implementation and oversight of all health and safety operations.

- Project Manager responsible for development of the remedial investigation work plan at the METCOA mixed waste Superfund site in Pulaksi, Pennsylvania. The site included radioactive, heavy metals, and chlorinated solvent contaminants.

- Project Manager responsible for directing the excavation, cleanup and remediation of the TWA L1011 crash site at Runway 24, Kennedy Airport, NY. Efforts included directing all contractor cleanup efforts, liaison with the FAA, NYSDEC and airport operations to expedite cleanup and reopening of this active runway.

- Field Engineer responsible for directing all field investigations at various leaking underground storage tank sites in the New England/New York area for the US Postal Service.

MICHELLE K. NANNEN, M.S.
SENIOR MARINE ECOLOGIST

Education:

M.S., MSRC/SUNY Stony Brook - Marine Environmental Sciences
B.S., Rider University- Marine Science

Professional Affiliations:

Sigma Xi National Scientific Research Society

Certifications:

SCUBA Certified

RESPONSIBILITIES:

- Project Design, Implementation, and Management
- Sample and Data Analysis
- Report Preparation, Permit Application, Essential Fish Habitat Assessment

EXPERIENCE:

Ms. Nannen has a broad marine science background with focused areas of study in marine benthic and epibenthic ecology and marine fisheries. Ms. Nannen has substantial experience conducting long term field sampling programs for several government and City agencies including: Verdant's Roosevelt Island Tidal Energy project which coupled hydroacoustic and trawl sampling to assess the adult finfish populations in the East River at the proposed site for underwater turbines to be used for tidal energy; NYC Department of Parks and Recreation and NYC Economic Development Corporation's United Nations / East River Aquatic Survey which included a survey of adult finfish, epibenthos, water quality, sediment chemistry, bathymetry, and ADCP hydrography at the location of a proposed UN expansion consisting of an esplanade along the East River waterfront; NYCDEP Jamaica Bay Ecosystem Studies focusing on the effect of water quality on ichthyoplankton survival; DSNY Solid Waste Management Plan studying the marine environment at eight Marine Transfer Stations that were proposed to be rehabilitated; NYCDEP Use and Standards Attainment Project analyzing effects of water quality on marine fisheries, benthos, and epibenthos; and USACE Fire Island Inlet to Montauk Point Beach Reformulation Study where several years of data on marine fisheries, benthos, submerged aquatic vegetation, and estuarine habitats were collected and analyzed. Field sampling techniques applied during these programs include: trawling, seining, gill netting, plankton sampling, benthic and sediment sampling, epibenthic sampling, and water quality monitoring. Ms. Nannen is familiar with ecological communities of New York Harbor, Jamaica Bay, and Shinnecock, Moriches, and Great South Bay on Long Island. Ms. Nannen has also prepared several Essential Fish Habitat (EFH) Assessments for locations throughout New York Harbor. Other significant experience includes acute sediment toxicity testing using organic compounds and species associated with New York Harbor.

Ms. Nannen's strong background in marine ecological communities has been essential in her involvement in feasibility studies for new technologies, including the sitation of proposed offshore wind electric generators. Ms. Nannen has authored desktop natural resource assessments used in the proposed sitation of offshore electric wind generators, including a wind park proposed south of Long Island, off the New Jersey coast, and in Delaware waters. She has also created an extensive database (over 900 entries) on offshore wind energy, including many European studies on existing facilities for the Long Island Power Authority and used this database for extensive literature reviews. Ms. Nannen is also responsible for the preparations of Article VII applications for Long Island utilities.

PUBLICATIONS:

Stoecker, D.K., Li, A., Coats, D.W., Gustafson, D.E., Nannen, M.K., 1997, "Mixotrophy in the Dinoflagellate, *Prorocentrum minimum*." Marine Ecology Progress Series. 152, 1-12.

RESEARCH PRESENTATIONS:

Northeast Fish and Wildlife 58th Annual Meeting. Portland, ME. April, 2002.
Society of Environmental Toxicology and Chemistry 21st Annual Meeting, Nashville, TN. November, 2000.
Northeast Geological Society of America Annual Meeting, Portland, ME. March, 1998.

MICHELLE K. NANNEN, M.S.
SENIOR MARINE ECOLOGIST

Education:

M.S., MSRC/SUNY Stony Brook - Marine Environmental Sciences
B.S., Rider University- Marine Science

Professional Affiliations:

Sigma Xi National Scientific Research Society

Certifications:

SCUBA Certified

RESPONSIBILITIES:

- Project Design, Implementation, and Management
- Sample and Data Analysis
- Report Preparation, Permit Application, Essential Fish Habitat Assessment

EXPERIENCE:

Ms. Nannen has a broad marine science background with focused areas of study in marine benthic and epibenthic ecology and marine fisheries. Ms. Nannen has substantial experience conducting long term field sampling programs for several government and City agencies including: Verdant's Roosevelt Island Tidal Energy project which coupled hydroacoustic and trawl sampling to assess the adult finfish populations in the East River at the proposed site for underwater turbines to be used for tidal energy; NYC Department of Parks and Recreation and NYC Economic Development Corporation's United Nations / East River Aquatic Survey which included a survey of adult finfish, epibenthos, water quality, sediment chemistry, bathymetry, and ADCP hydrography at the location of a proposed UN expansion consisting of an esplanade along the East River waterfront; NYCDEP Jamaica Bay Ecosystem Studies focusing on the effect of water quality on ichthyoplankton survival; DSNY Solid Waste Management Plan studying the marine environment at eight Marine Transfer Stations that were proposed to be rehabilitated; NYCDEP Use and Standards Attainment Project analyzing effects of water quality on marine fisheries, benthos, and epibenthos; and USACE Fire Island Inlet to Montauk Point Beach Reformulation Study where several years of data on marine fisheries, benthos, submerged aquatic vegetation, and estuarine habitats were collected and analyzed. Field sampling techniques applied during these programs include: trawling, seining, gill netting, plankton sampling, benthic and sediment sampling, epibenthic sampling, and water quality monitoring. Ms. Nannen is familiar with ecological communities of New York Harbor, Jamaica Bay, and Shinnecock, Moriches, and Great South Bay on Long Island. Ms. Nannen has also prepared several Essential Fish Habitat (EFH) Assessments for locations throughout New York Harbor. Other significant experience includes acute sediment toxicity testing using organic compounds and species associated with New York Harbor.

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PUBLICATIONS:

Stoecker, D.K., Li, A., Coats, D.W., Gustafson, D.E., Nannen, M.K., 1997, "Mixotrophy in the Dinoflagellate, *Prorocentrum minimum*." Marine Ecology Progress Series. 152, 1-12.

RESEARCH PRESENTATIONS:

Northeast Fish and Wildlife 58th Annual Meeting. Portland, ME. April, 2002.
Society of Environmental Toxicology and Chemistry 21st Annual Meeting, Nashville, TN. November, 2000.
Northeast Geological Society of America Annual Meeting, Portland, ME. March, 1998.

DREW PANKO
ORNITHOLOGY AND STATISTICS SPECIALIST

Education:

BS - Union College (Schenectady, N.Y.)
MA - City University of New York
Lehman College
Manhattan College - NSF
Woodrow Wilson Fellowship, Physics Institute

Affiliations:

American Association for the Advancement of Science (AAAS)
American Association of Physics Teachers (AAPT)
National Science Teachers Association (NSTA)
Science Teachers Association of New York State (STANYS)
Numerous Nature and Ornithological Societies

RESPONSIBILITIES:

Avian Surveys
Statistical Data Analysis

RESEARCH INTERESTS:

Hawk Migration - numbers, timing, routes
Bird Song - description, analysis, function
Deer Tick - population dynamics in Westchester
Saw-Whet Owl migration and overwintering studies
Coverboard methods for amphibian & reptile surveys

ENVIRONMENTAL CONSULTING; Ornithology, Herpetology and Statistics:

Field studies and associated statistics for EEA, Inc., Garden City, NY
Statistical Analysis Benthic Survey: Napeague to Fire Island inlet.
Statistical Analysis Water Quality Jamacia Bay, December 2005
Field studes in Ornithology, and Herpetology 2000-2006 on Projects in Gilgo, East Hampton, Staten Island, Brooklyn and Deer Park NY

TEACHING EXPERIENCE:

1963 - 1996	**Roosevelt H.S.** (Yonkers, N.Y.)	**Years**
	Regents Chemistry	30
	A.P. Chemistry	5
	non-Regents Chemistry	6
	Regents Physics	26
	Environmental Science	2
	Ecology	4
1997-8	Olympiad Consultant 2	
1998 - 2000	**Tuckahoe H.S.** (Yonkers, N.Y.)	**Years**
	Consultant	3
2000 - 2006	**Academy Mount Saint Ursula** (Bronx)	**Years**
	Consultant	6

1968 - Permanent New York State Teaching Certification - Chemistry, Physics, General Science

PUBLICATIONS:

"Terrestrial Avian Survey." Evaluation endangered species present. Drew Panko and Gertrude Battaly. May 2006.

"Gull Evaluation Report." Evaluation of pest gull problem in Hauppauge, NY, with recommended actions. Drew Panko and Gertrude Battaly. Dec 15, 2004.

"Analyzing Hawk Count Data: Graphs that show Year to Year Trends." Drew Panko and Gertrude Battaly. HMANA Hawk Migration Studies. Sep 2003.

"Analyzing Hawk Count Data: How to Interpret Regression Equations." Drew Panko and Gertrude Battaly. HMANA Hawk Migration Studies. May 2004.

"Seaview Avian and Natural Resource Study. May to July, 2001." Study conducted for EEA, Inc. Gertrude R. Battaly and Drew Panko, Science Enrichment Associates

"Avian and Herpetological Study at the Ross School, East Hampton, April to June, 2000." Study conducted for EEA, Inc. Gertrude R. Battaly and Drew Panko, Science Enrichment Associates

Statistics for "Benthic Invertebrate Survey: Napeague to East of Fire Island Inlet" through the Army Corps of Engineers for URS Greiner Woodward Clyde

"Eastern Screech-Owl, Otus asio: Drew Panko and Gertrude R. Battaly, in Bull's Birds of New York State. Emanuel Levine, ed. Cornell University Press. 1998.

"Decline of Migrant Sharp-shinned Hawks in the NYC Region" HMANA Hawk Migration Studies. February 1990

Yearly Newsletter of the Fire Island Raptor Enumerators (1982-2000)

in preparation:

25 Years of Hawk watching on Fire Island
(*THE KINGBIRD* - publication of the Federation of New York State Bird Clubs, Inc.)

NATURAL HISTORY ACTIVITIES:

Founded and organized the Fire Island Hawk watch, 1982-current
Natural History survey for Westchester County Parks 1995-current

NYS Breeding Bird Atlas 1980-86 & 2000-2005

Greenwich-Stamford Breeding Bird Count - Area coordinator 1979-current
Greenwich-Stamford Christmas Count - Area coordinator 1975-current
Bronx-Westchester Christmas Count - Subarea coordinator 1980-current
NorthEast Hawk Watch, Board of Directors, 1988 - current
Harriman Winter Bird Count - 2004 - current
Silloway Count (Breeding birds in Harriman State Park) 1990-current
NY State Waterfowl count, Long Beach, Long Island 2002-current

COMMUNITY ACTIVITIES:

Town of Greenburgh Environmental Quality Control Commission	14 years
Saw Mill River Audubon Society Board of Directors - Field Trip Chairman	17 years
Federated Conservationists of Westchester County (FCWC) Board of Directors	29 years

LAURA A. SCHWANOF
LANDSCAPE ARCHITECT/SENIOR ECOLOGIST

Education: *B.S., State University of NY at Syracuse - Environmental Science and Forestry*

Professional Affiliations:
American Society of Landscape Architects
Long Island Botanical Society
Society for Ecological Restoration
Society of Wetland Scientists
The Wildlife Society

Certifications: *Landscape Architecture - New York License No. 1479*

Awards: 1993 ASLA Design Competition - Hofstra University Bird Sanctuary, Uniondale, NY

RESPONSIBILITIES:

- Project Management
- Preparation & submittal of Permit Applications, Technical Reports and Environmental Assessment Forms
- Watershed and Wetland Delineations
- Ecological Inventories and Assessments
- Landscape Designs and Specifications
- Erosion & Sediment Control Plans

EXPERIENCE:

Ms. Schwanof has 26 years of work experience related to environmental planning & permitting, natural resources inventory and assessment, wetland delineation and landscape design. Her areas of expertise include environmental analyses, coastal zone and site planning, soil and water conservation, and terrestrial and wetland ecology. Since joining EEA in 1997, Ms. Schwanof has been responsible for field investigations focused on watershed and wetland assessment, ecological restoration designs, erosion and sediment control, and wildlife and botanical inventory. She is currently the manger of the Stony Brook Field Office.

Ms. Schwanof is intimately familiar with the wetland permitting process, the involved regulatory agencies and procedures necessary to expedite the review process. She has completed wetland permit applications and successfully obtained permits for several recent EEA projects, including: NYSDEC and ACOE permits plus NYSDOS approval in support of the Bar Beach Lagoon tidal wetland restoration project in Hempstead Harbor, Nassau County; NYSDEC and ACOE permits for a 3 acre-wetland mitigation project for the New York City Department of Sanitation (DSNY) waste transfer facility at the Fresh Kills Landfill, Staten Island; and a NYSDEC permit for vegetation control, grading and stormwater improvements at the Nissequogue Golf Club in Saint James, Suffolk County, NY. Ms. Schwanof also serves as one of EEA's senior wetland scientists conducting wetland delineations and assessments for complex drainage areas.

With regard to stormwater management planning, Ms. Schwanof recently completed three watershed management plans: the 2006 Scudder's Pond Subwatershed Plan for the Hempstead Harbor Protection Committee in Nassau County; the Twin Lakes Restoration Plan for the New York Botanical Garden in the Bronx, and the environmental and stormwater control components of the North Shore Embayments Watershed Management Plan for the Suffolk County Department of Health Services. All of these studies entailed delineation of sub-watershed areas, identification of environmental hot-spots/problem areas, land uses, stormwater outfalls, road ends and other contributing point sources, runoff and pollutant

loading projections, identifying and priority ranking opportunities to implement Best Management Practices (BMPs). During her previous tenure with an engineering firm, Ms. Schwanof mapped the ecological communities within 500 feet surrounding all waterways maintained by the SCPDW under their dredging program. She also co-authored the natural resources sections of the Draft Suffolk County Dredging Program GEIS.

As a Licensed Landscape Architect, registered in the State of New York, Ms. Schwanof is also adept at preparing detailed grading and landscape plans. She has completed the design plans and technical specifications for a variety of public and private facilities including wetland creation and restoration projects, municipal landfills and parks. Ms. Schwanof recently completed the landscape designs and technical specifications for the NCDPW Massapequa Creek and Pond Restoration Project which included innovative green shoreline stabilization techniques. She is currently preparing two shoreline restoration plans: one for the NYC Economic Development Corporation on a previously filled industrial property along Westchester Creek in the Bronx; the other for a Homeowners' Association in Moriches, Suffolk County along the Forge River. She has also prepared the landscape plans, details and specifications, conducted wetland delineations and compliance inspections for the NYCDEP/DDC Princes Bay Tidal Creek stream relocation/wetland restoration project, SE-698 Seguine Avenue on Staten Island. This six-year project was successfully completed and accepted by NYSDEC in July 2004. In 2002, Ms. Schwanof completed a tidal wetland restoration plan for Bar Beach in the Town of North Hempstead. She oversaw the installation of the first phase of this successful project in 2003, and is currently inspecting the installation of the second phase in 2007. Ms. Schwanof also completed a 3 acre-wetland mitigation plan, permitting, and oversight of plant installation for the New York City Department of Sanitation (DSNY) waste transfer facility at the Fresh Kills Landfill. Project construction was completed in 2006, environmental monitoring is underway, and the project has received preliminary acceptance from NYSDEC.

Ms. Schwanof began her career with the USDA Soil Conservation Service, serving Nassau, Suffolk, and Dutchess Counties. As a Soil Conservationist, Ms. Schwanof developed resources management plans for farms, nursery operations, schools, and municipal properties which assessed the ambient condition of water bodies (e.g., streams, ponds, flood plains, etc.), soil, vegetation, livestock and wildlife resources, and projected future scenarios both with and without recommended BMPs. Plans focused on soil erosion and stormwater control, wildlife habitat management, crop sustainability, and vegetative stabilization measures for critically eroding areas, such as steep slopes (including bluff faces, cut banks, sand and gravel pits) and eroding shoreline areas.

ERIN M. BROSNAN
ECOLOGIST

Education:
B.S. Saint Michael's College, Colchester, Vermont – Biology & Environmental Studies
M.E.M. Duke University, Durham, North Carolina – Ecosystem Science & Management

Professional Affiliations:
Ecological Society of America
Society of Wetland Scientists
Society of Ecological Restoration

Certifications:
Rutgers University's Certification in Wetland Delineation

RESPONSIBILITIES:
- Biological Inventories & GIS Mapping
- Ecological Restorations
- Wetland Delineations & Permitting
- Invasive Species Management
- Environmental Assessments

EXPERIENCE:
Erin Brosnan joined EEA in May 2007 as an ecologist specializing in terrestrial and wetland ecology. Since joining the firm, Ms. Brosnan has performed USACE & NYSDEC wetland delineations, conducted ecological assessments and natural community characterizations, and developed technical specifications and planting plans.

Ms. Brosnan is project manager for a private pond and freshwater wetland restoration involving a dredge operation and bank stabilization treatment due to past erosion and sedimentation from flash stormwater flow. This multi-phase project requires the production of a bathymetry survey, sediment and groundwater sampling reports, and grading and planting plan schematics for submittal to town, state and federal agencies for permit approval.

Ms. Brosnan conducted a water quality investigation in a local lake system to identify possible sources of reoccurring filamentous algal blooms and determine potential treatment options and recommendations for overall system health enhancement. Nutrient overload was identified as the most likely source and a series of best management practices (BMPs) were recommended to reduce the pollution loads entering the lake system.

Ms. Brosnan co-authored an endangered-threatened species status report for NYSDEC project permit approval, which included a summary of federal and state endangered-threatened species regulations and protective measure requirements, list of protected species associated with site habitat, field assessment of habitat quality and evaluation of species presence or absence.

Ms. Brosnan is part of the design team responsible for the creation of a 35-acre nature park preserve in Far Rockaway, NY. The preserve will serve as a wildlife corridor, a protective buffer between beachfront communities and breeding shorebirds, and a public educational destination equipped with a nature center and loop trail. She created the plant schedule for the five ecologically significant communities to be enhanced or established in the park. She assisted in site amenity selections (stone pathway material, benches, bicycle rack, trash receptacle, etc.) and developed the associated technical specifications, along with other sections such as the invasive species removal and erosion and sediment control measures.

Ms. Brosnan co-authored a Shoreline Vegetation Management Plan for a coastal private community concerned with future management in areas possibly designated as one or more of the following: tidal wetland, freshwater wetland, coastal erosion hazard area (CEHA), protected species habitat, or rare ecological community. As part of the plan, potential restoration sites for erosion control and invasive plant removal were identified, treatment options were recommended, and permit requirements were detailed.

Ms. Brosnan oversaw the construction of a tidal wetland restoration project in Hempstead Harbor at the Town of North Hempstead's Bar Beach in Port Washington, New York. Construction oversight involved confirming soil elevations were met, ensuring all invasive plants and their rootstocks were removed and wetland plantings were properly installed, as well as maintaining a construction photo log and task completion punchlist.

Ms. Brosnan recently designed a landscape plan surrounding a freshwater pond to improve the natural aesthetics of the apartment complex. The project includes Bio-engineering bank stabilization treatments of extremely steep slopes and plant eradication of nuisance and invasive species. The design will provide ground cover and color throughout the year, attract native birds and butterflies, increase native plant diversity and enhance overall ecosystem health.

Ms. Brosnan was EEA's lead field ecologist responsible for the identification of all federal wetlands that receive stormwater flows from NYS highway routes in Nassau, Suffolk, and the five boroughs of NYC, Westchester and Rockland Counties. Serving as the wetland specialist for field survey crews, she identified federal wetlands and assisted with outfall characterization. Reconnaissance work included Ms. Brosnan creating local GIS hydric soil maps, surface hydrology maps, and federal and state listed wetland maps. All field identified wetland areas were GPS-ed with associated attribute characteristics to be plotted in ArcGIS.

While working with the US Forest Service and the US Fish & Wildlife Service, Ms. Brosnan gained experience in conducting sensitive species surveys and habitat evaluations. She conducted a variety of endangered and threatened species investigations including presence/absence, reproductive success and suitable habitat assessments for the great gray owl (State Endangered in CA), northern spotted owl (Federally Threatened in CA), southwestern willow flycatcher (Federally Endangered in CA), Kirtland's warbler (Federally Endangered in MI), and common tern (State Threatened in MI).

Ms. Brosnan served as an Invasive Species Management Biological Technician for the U.S. Fish & Wildlife Service in Michigan. She operated as a licensed pesticide applicator and a federally licensed ORV operator. Ms. Brosnan oversaw invasive species management, plant identification mapping (GIS) and herbicide treatment of over 500 acres of wetlands. In this position, she supervised prison work crew and junior volunteers. As a technician, Ms. Brosnan also conducted a glossy buckthorn herbicide concentration study and a refuge avian habitat assessment utilizing her plant and avian identification skills and habitat evaluation research methods. She also assisted with field studies on: beech bark disease; small mammal climate change; and frog deformity.

In graduate school at Duke University, Ms. Brosnan served as the Wetland Research Lab Assistant guiding students through various wetland field exercises focusing on hydrology, soils and plants. As part of her graduate work she assisted with on-going stream and wetland restoration projects – the Mecklenburg County Little Sugar Creek Project, Sandy Creek Stream Restoration Project and the Southern Wetland Assessment Management Park. These projects enabled Ms. Brosnan to become proficient in plant and avian identification, numerous sample collection techniques, and the laboratory analysis of soils nutrients and texture, vegetation, surface and groundwater samples. Through her work on these projects, Ms. Brosnan acquired an in depth knowledge of restoration project planning processes, site implementation and assessment techniques. Completion of specialized courses like Geospatial Analysis for Conservation Management, Biostatistics, Environmental Law, Land Use Principals and Ecosystem Based Management has provided her with the tools to apply her extensive scientific background in a professional setting.

GERTRUDE R. BATTALY
ORNITHOLOGY AND STATISTICS SPECIALIST

Education:

MS – Fordham University – Biology
BS – The City College of New York - Mathematics

Affiliations:

Science Teachers Association of New York State
New York State United Teachers
Eastern Bird Banding Association
NorthEast Hawk Watch, Board Member, 1994 - present
Hawk Migration Association of North America
Audubon Society

RESPONSIBILITIES:

Avian surveys
Statistical data analysis

CURRENT RESEARCH:

I. Explore the relationships between birds, ticks, and tick-borne disease.
   1. Collect and analyze data regarding the number of *Ixodes scapularis* on birds banded at Rockefeller State Park Preserve, Westchester County, since 1984. The purpose is to determine how the extent of overlap in the occurrence of larval and nymphal *scapularis* changes from year to year, as the tick population becomes established.
   2. Collect and analyze data regarding the number of I. scapularis on birds banded at Robert Moses State Park, Fire Island, New York, since 1988. The purpose is to determine the relative importance of fall migrants in the dispersal of *I. scapularis*

II. Explore the relationship between birds and West Nile Virus. Collect blood from select bird species for preliminary study of West Nile Virus.

III. Determine the extent of migration of Northern Saw-whet Owls through Westchester County. Compare migration in central Westchester with that along the coast of Long Island Sound.

IV. Study the ecology of over-wintering Northern Saw-whet Owls along coastal New York, in Pelham Bay Park, Bronx, and Gateway NRA, Brooklyn. Study includes roost site analysis, extent of movement, condition ofthe owls, and evaluation of the breeding latitudes of the owls using hydrogen isotope analysis, and includes color marking, and use of radio telemetry.

V. Study the ecology of Eastern Screech Owls to determine extent of movements at Westchester Community College and to access their potential threat to Northern Saw-whet Owls during use of the Owlnet protocol when banding migrating Saw-whets.

PERMITS:

Federal Bird marking and Salvage Permit (with permit to collect blood and feathers)
Type: Master Personal: Sep 4, 1986 – Present
Auxilliary Marking: Color marking, 3/23/2004 to present
Telemetry: Northern Saw-whet Owl, Eastern Screech Owl, 7/05/2005 to present
Subpermit Personal (Katherine Anderson); 1983-1986
Issued by: U.S. Department of the Interior FWS, Bird Banding Laboratory, Office of Migratory Bird Management, Laurel, Maryland 20708
License to Collect or Possess; 1986 - Present
Issued by: New York State Department of Environmental Conservation, Division of Fish and Wildlife, Special Licenses Unit, 50 Wolf Road, Albany, NY 12233-4752

EXPERIENCE:

Teacher: Biology, AP Biology, Calculus, Physics, and Science Research - October 1990 - present
Science Department Chair, Sep 1995-Aug 1997; Academic Technology Coordinator, Sep 1997-present
Academy of Mount Saint Ursula, 330 Bedford Park Blvd., Bronx, NY 10458

Adjunct Faculty, Mathematics: Statistics, Calculus, Pre-Calculus - Sep 1973 - present
Westchester Community College, Valhalla, New York 10595

Environmental Consultant: Ornithology, Herpetology, Statistics- April, 2000 - present
EEA, Inc. 55 Hilton Avenue, Garden City, New York 11530- part-time to present
Statistical Analysis, Icthyoplankton, Larvae and Eggs, Jamaica Bay, Long Island, NY
Avian and Herpetological Surveys in East Hampton, Deer Park, Staten Island, and Brooklyn, NY
Statistical Analysis of Benthic Invertebrate Survey: Napeague to East of Fire Island Inlet
Army Corps of Engineers Project for URS Greiner Woodward Clyde
Terrestrial Avian Survey, Gilgo, Long Island, NY

Research Consultant: Ornithology, Statistics - May to Aug 1989; Jun to Oct 1987, 1988, 1999, 2000
NY Medical College Medical Entomology Laboratory, Grassland Road, Valhalla NY 10595
1989 Project, with the federal Center for Disease Control: "Ecology of Lyme Disease in the Suburban Residential Neighborhood"
1999 Project: birds and Erlichiosis
2000 Project: birds and West Nile Virus

Hawks: Hook Mountain Hawk Watch, Nyack, NY: coordinator, Fall, 2004-present: watcher-21 years
FIRE, Fire Island Raptor Enumerators: watcher, Fall,1982 - present
NEHW, NorthEast Hawk Watch: Board member, 1994-present
Conference Coordinator, 1988; Presenter (with D Panko), 3/2002,
"Coastal Migrations: Does Long Island Sound Make a Difference?"*
"Northern Saw-whet Owl, Ecology and Hydrogen Isotope Analysis", 3/3006

HMANA, Hawk Migration Association of North America Conference, 3/3003,
"Using Excel to Analyze Hawk Watch Data" (with D. Panko)*
*Both presentations use Peregrine Falcon migration data

Web master: 1. Bat's Bytes (175+ pages) http://www.battaly.com
Educational pages for biology, statistics, calculus, and physics.
On-line databases for Herpetological observation and Northern Saw-whet Owl study
FIRE: Fire Island Raptor Enumerators Hawk Watch; NEHW: NorthEast Hawk Watch
On-line Lessons: 1. Graphing Your Data, 2. Regression Line: How to Construct the Best Fit
2. Academy of Mount Saint Ursula (200+ pages) http://www.amsu.org
General school information; Instructional pages for faculty technology and calculus students
3. EEA, Inc. (100+ pages) http://www.eeaconsultants.com
4. St. John's Episcopal Church (75+ pages) http://www.stjohnshuntington.org

Science Olympiad: Regional Coordinator, Lower Hudson Region, NY, 2001 - 2002
Regional Coordinator, Metropolitan Region, NY, 1998 – 2000
NY State Event Coordinator, 1998-2002 Author. Bird Brain event.
Teacher, Mathematics - Sep 1967-Dec 1968; Science for Gifted Children Oct 1984-Jun 1985
Valhalla High School, 300 Columbus Avenue, Valhalla, NY 10595
Teacher Naturalist - Jul 1983, 1984, 1985, 1986, Saturdays 1983, 1984
Audubon Center in Greenwich, 613 Riversville Road, Greenwich, Connecticut 06030
Computer Programmer - May 1963 - September 1964, summers 1965, 1966
Technical Library Assistant - Oct 1961 - May 1963
United Nuclear Corporation, Grasslands Road, Eastview, New York

HONORS: Kappa Mu Epsilon, Mathematics Honorary Fraternity, SUNY Albany, 1960.

PUBLICATIONS:

- "Gull Evaluation Report." Evaluation of pest gull problem in Hauppauge, NY, with recommended actions. Drew Panko and Gertrude Battaly. Dec 15, 2004.
- "Analyzing Hawk Count Data: Graphs that show Year to Year Trends." Drew Panko and Gertrude Battaly. *HMANA Hawk Migration Studies.* Sep 2003.
- "Analyzing Hawk Count Data: How to Interpret Regression Equations." Drew Panko and Gertrude Battaly. *HMANA Hawk Migration Studies.* May 2004.
- "Avian reservoirs of the agent of human granulocytic ehrlichiosis." Daniels TJ, Battaly GR, Liveris D, Falco RC. *Emerg Infect Dis* [serial online] 2002 Dec.
- "Seaview Avian and Natural Resource Study. May to July, 2001." Study conducted for EEA, Inc. Gertrude R. Battaly and Drew Panko, Science Enrichment Associates
- "Avian and Herpetological Study at the Ross School, East Hampton, April to June, 2000." Study conducted for EEA, Inc. Gertrude R. Battaly and Drew Panko, Science Enrichment Associates
- Contributed statistics to "Benthic Invertebrate Survey: Napeague to East of Fire Island Inlet" through the Army Corps of Engineers for URS Greiner Woodward Clyde

- "Eastern Screech-Owl, Otus asio: Drew Panko and Gertrude R. Battaly, in *Bull's Birds of New York State.* Emanuel Levine, ed. Cornell University Press. 1998.
- "Relative Importance of Bird Species as Hosts for Immature *Ixodes dammini* (Acari: Ixodidae) in a Suburban Residential Landscape of Southern New York State." Gertrude R. Battaly and Durland Fish. *Journal of Medical Entomology*, Jul 1993; 740-747.
- "The Seasonal Occurrence of *Ixodes dammini* (Acarina: Ixodidae) and Ixodes dentatus on Birds in a Lyme Disease Endemic Area of Southeastern New York State." Gertrude /R. Battaly, Durland Fish, and Robert C. Dowler. J. *New York Entomol. Soc.* 95(4):461-468, 1987.
- "Deer Population: A Growing Probem in Westchester County," *Westchester Environment* 88(1):6, 1988.
- "Dialogue on Natural Resources: Habitat Management," *Westchester Environment* 87(2):7, 1987.
- "Salamanders and Species Survival," *Westchester Environment*, Mar 1982.
- Co-author of Town of Greenburgh Wetlands Ordinance and Environmental Quality Review Law

BIOQUIZ. A computer quiz program designed to drill biology students in biological definitions.
ORGANISM. A computer program designed to organize information about structure and taxonomy of representative organisms.
Poems: *Respiration* (for AP Biology students), *Isaac Newton* (for calculus and physics students)

COMMUNITY SERVICE AND LEADERSHIP

League of Naturalists, Bear Mountain, 1998-present
Environmental Quality Control Commission, Town of Greenburgh, Westchester, County NY
Member Feb 1976 - Jun 1987, Chair Mar 1978 - Jun 1987
Federated Conservationists of Westchester County,
Director 1982 - 1988; 1st Vice President 1984 - 1987; President, Jun 1978 - Mar 1988
League of Women Voters of Greenburgh, Westchester County, NY
Member 1974 - 1981, President 1979

PUBLIC PROGRAMS

Northern Saw-whet Owl: Ecology and Hydrogen Isotope Analysis, NorthEast Hawk Watch Conference
Butterflies of the Audubon Center, Greenwich Ct; . Dragonflies of Westchester County
Sand in Your Shoes, Hawks in Your Binocs: Fire Island Raptor Enumerators
The Relationship of Birds to Human Lyme Disease and Erlichiosis
Hands-on Bird Banding: The Migration and Ecology of Birds
Using Audubon Christmas Bird Counts to Assess Trends in Bird Populations

ROY R. STOECKER, Ph.D.
VICE PRESIDENT
PRINCIPAL ENVIRONMENTAL SCIENTIST

Education:

B.S., Manhattan College - Biology and Chemistry
M.S., Long Island University - Marine Biology
Ph.D., University of Hawaii - Botany

Affiliations:

Offshore Wind Energy Collaborative – Founding Member
American Wind Energy Association
Science Committee, New York Water Environmental Association
Commissioner, Town of Babylon Environmental Conservation Commission
Technical Committee, South Shore Estuary Reserve Council
Water Environment Federation

RESPONSIBILITIES:

Principal-in-Charge of all environmental-energy projects, ecological, water quality and marine environmental studies.

EXPERIENCE:

Co-founder of the firm and having worked in the fields of environmental and life sciences for approximately 30 years, Dr. Stoecker has managed many significant environmental studies in the fields of environmental impacts of energy projects, wetlands and marine ecology, water quality, and environmental health.

Many of Dr. Stoecker's project activities involve design of large scale scientific/environmental programs. He is currently Principal-in-Charge of the New York City Department of Environmental Protection's Jamaica Bay Ecology Studies Program. As a part of the NYCDEP Jamaica Bay Long Term Comprehensive Control Plan, he is directly responsible for all of the natural resource studies presently underway. Among these are ichthyoplankton, adult finfish, and water quality programs. Other large-scale NYCDEP projects for which he acted as Principal-in-Charge included: Jamaica Bay Use Standards Attainment Study; Jamaica Bay Eutrophication Study, a marine aquatic sampling program designed to contribute data to a nutrient modeling program for the Jamaica Bay Estuary. He was also Project Director for the NYCDEP Citywide Floatables Program, which required design of many unusual types of field protocols and creation of unique sampling gear. For the NYC Department of Sanitation (DSNY), he was Project Director for numerous large scale prfojects ranging from preparing EIS sections of the NYC Comprehensive Solid Waste Management Plan to the and the design and bio-engineering of new wetlands at the Fresh Kills Landfill. He was also recently in charge of the Army Corps of Engineers South Shore of Long Island Storm Damage Mitigation Program. For this program he was directly responsible for offshore fisheries programs, backbay fisheries and benthic invertebrates, submerged and aquatic vegetation, bottom profiling, and numerous other programs.

As a Principal Environmental Scientist, Dr. Stoecker has a long history of involvement in wind energy programs and assessing impacts to natural resources. Shortly after founding the firm in 1979, Dr. Stoecker developed a wind energy siting protocol that led to numerous projects with major firms looking into utilizing wind energy technologies. More recently, Dr. Stoecker was retained by AWS Truewind to prepare environmental sections of an offshore siting study for the Long Island Power Authority (LIPA). The success of the program led to a more detailed study and the selection of an area south of Long Island for development of a proposed 140 MW wind park. Subsequently LIPA asked him to serve on the wind energy developer selection committee. Presently he provides advice and counsel to LIPA on wind energy-natural resource assessments and provides assistance and presentations to the public participation program.. He is also Principal in Charge of preparation of a Public Service

Commission Article VII Application for Keyspan Energy for the offshore wind park. Other wind energy program overseen by Dr. Stoecker include the siting study for Atlantic Renewables and development of an 800+ citations wind environmental data base and web site.

DENISE HARRINGTON, AICP
ENVIRONMENTAL PLANNER/SCIENTIST

Education:

B.S., Grinnell College – Economics & Environmental Science
B.S., City University of NY – Queens College - Biology
M.S., State University of NY at Syracuse - Forestry

Professional Affiliations:

American Planning Association
American Littoral Society

Certifications:

American Institute of Certified Planners
Rutgers University's Certification in Wetland Delineation

RESPONSIBILITIES:

- Project Management
- Permitting & Permitting Feasibility Studies
- Wetland Delineations
- Site Planning and Environmental Analysis
- Ecological Inventories and Assessments

EXPERIENCE:

Denise Harrington has 13 years of experience related to SEQRA coordination; environmental permitting, including but not limited to NYSDEC, USACE and NYCDEP; environmental planning; grant writing; natural resource protection; wetland delineations; and project management.

Ms. Harrington has drafted and obtained environmental permits for the: Mill and Roslyn Pond Park, Pond Restoration; Twin Lakes Restoration; and LIE/CIP Interchange Improvement projects. She has completed three permitting feasibility studies for proposed waste to energy facilities in New York and New Jersey and an offshore wind system on and offshore of Long Island, New York respectively. These studies involved in-depth analyses of regulatory requirements of SEQRA, CEQRA, NYDSDEC, NYCDEP, NJDEP and USACE regulations. Ms. Harrington also completed an ecological inventory and SEQRA assessment for a large parcel in the Central Pine Barrens addressing potential impacts to tiger salamanders (a State endangered species), freshwater wetlands, rare plants, wildlife and forest fragmentation. She recently completed an Essential Fish Habitat for a large waterfront development in Brooklyn, New York. She has drafted and obtained environmental permits, prepared NYSDOS coastal zone management consistency assessment forms, and satisfied SEQRA requirements for a diverse range of projects including dredging, landfill closures, residential developments, wetland restoration and creation. Ms. Harrington is also experienced in conducting field inspections and technical review of environmental and coastal projects.

Ms. Harrington has performed USACE & NYDEC tidal and freshwater wetland delineations, conducted ecological assessments and developed technical specifications based on environmental and planning principles to insure protection of wetlands and other natural resources during development. She completed portions of a detailed DEIS and FEIS required by CEQR focusing on the fragmentation of songbird habitat and shadow impacts. Recently, Ms. Harrington completed a field reconnaissance study and analysis of the potential impacts of a NYC Amtrak bridge repair on tidal wetlands, NYS and NYC significant coastal fish and wildlife habitat as a supplement to NYDEC & USACE permit applications.

During her previous employment, she served as an environmental scientist and interim Commissioner of Planning for a municipality on Long Island and as a Wetlands Biologist with the New York State Department of Environmental Conservation Freshwater Wetlands Unit. As Planning Commissioner, Ms. Harrington was responsible for all SEQRA coordination, all development proposals within the Town and overseeing Planning Department and Board of Zoning & Appeals (BZA) staff. Projects subject to detailed EISs, SEQRA requirements and variances requests were reviewed, negotiated and ultimately presented to the BZA and Town Boards. Also, she was responsible for the preparation of SEQRA forms and environmental permit applications for all Town project coordinating with Public Works, Parks and Building Departments. Ms. Harrington was also responsible for the delineation of wetlands; the review of site development plans; and the preparation of code revisions and technical memorandums regarding environmental practices and projects. She also developed landscape and erosion control plans, details and specifications for a variety of projects including wetlands restoration and protection, municipal developments and park facilities. Ms. Harrington worked as the municipality's USEPA Brownfields Coordinator and as the municipal and technical liaison to the NYSDEC, NYSDOS and USACOE regarding wastershed planning, habitat restoration and water quality improvement projects.

BILL JACOBS
SENIOR ECOLOGIST & INVASIVE SPECIES SPECIALIST

Education:
B.B.A., Dowling College – Business Administration
M.S., State University of NY at Syracuse – Natural Resource Management

Professional Affiliations:
American Planning Association
Ecological Society of America
Society for Conservation Biology
Weed Science Society of America

Certifications:
New York State Certified Pesticide Technician, in Terrestrial and Aquatic Categories (3A and 5A)
US Fish and Wildlife Certification in Hazard Analysis and Critical Control Point Planning

RESPONSIBILITIES:

- Biological inventories
- Environmental assessments and permit applications
- Natural resource planning and management
- Invasive species management
- Water quality and ecological monitoring

EXPERIENCE:

Bill Jacobs has 18 years of experience in natural resource management and 12 year of experience in business management. Mr. Jacobs joined EEA in 2007 as a senior ecologist and invasive species specialist. Mr. Jacobs has prepared environmental data reports for the Suffolk County Department of Public Works, including assessments of essential fish habitat and endangered species. Mr. Jacobs prepared ArcGIS maps of submerged aquatic vegetation in the Peconic Estuary and Great South Bay. He has participated in wetlands delineations, environmental assessments, preparation of permit applications, and habitat restoration.

Mr. Jacobs is currently preparing technical design reports for Nassau County Department of Public Works. The reports include water quality sampling and an assessment of flora and fauna in ponds and wetlands, including invasive aquatic species. He is preparing New York City Environmental Quality Review (CEQR) assessments for developments in Brooklyn, NY. He has prepared construction specifications for invasive plant control at the Arverne Central Park Preserve in New York City.

Prior to joining EEA, Mr. Jacobs served as conservation project director for The Nature Conservancy on Long Island. Mr. Jacobs was responsible for the management of 38 nature preserves in Nassau and Suffolk counties; ecosystem-based planning; project management; habitat restoration; best management practices; budgeting; public policy; education; and public outreach. Mr. Jacobs has been a featured speaker at numerous conferences and events.

Mr. Jacobs conducted biological assessments and developed management plans for a wide variety of natural areas. Mr. Jacobs has conducted groundwater surveys and mapped invasive species in the Long Island Central Pine Barrens. He monitored habitat for the rare coastal barrens buckmoth (*Hemileuca maia* subspecies 5) in the Dwarf Pine Plains.

Mr. Jacobs has directed and participated in projects to protect and restore threatened and endangered species, including Long Island's only federally endangered plant species, sandplain gerardia (*Agalinis acuta*). Restoration for sandplain gerardia included controlling invasive plants at Hempstead Plains and Sayville Grassland. Mr. Jacobs has participated in the protection of rare beach-nesting birds, including the federally threatened piping plover (*Charadrius melodus*).

Mr. Jacobs is co-founder and former director of the Long Island Invasive Species Management Area (LIISMA). He is principal author of the Long Island Coordinated Invasive Plant Management Plan (2001). He helped spearhead efforts to establish the New York State Invasive Species Task Force and served as an at-large member. Working with partners around the state, Mr. Jacobs helped raise millions of dollars in new, dedicated funding for invasive species.

Prior work experience includes serving as executive director of the Natural Land Institute in Illinois, one of the nation's oldest and most accomplished land trusts. Mr. Jacobs served as consultant to the Illinois Nature Preserves Commission and contributed to the Illinois state plan for the conservation of biological resources.

Before working for the Natural Land Institute, Mr. Jacobs served as a wildlife biologist for New York State Department of Environmental Conservation, where he directed a youth mentoring program, participated in the restoration of wetlands habitat for eastern bog turtles (*Glyptemys muhlenbergii*), and assisted with studies of white-tailed deer (*Odocoileus virginianus*) and Canada geese (*Branta canadensis*). He directed an outdoor education program for people with disabilities at Onondaga County Parks Department.

MARY BETH BILLERMAN
SENIOR ECOLOGIST

Education:

B.S., Southampton College, New York, Biology and Environmental Science

RESPONSIBILITIES:

- Project Management
- EFH Assessments and Report Production
- Sample and Data Analysis
- Field Collection

EXPERIENCE:

Mary Beth Billerman has over twenty-five years experience working in the ecology field, specializing in marine sciences. Ms Billerman has extensive experience in field collection and analysis of finfish, benthic and ichthyoplankton samples in the Long Island area. Ms. Billerman has prepared numerous Essential Fish Habitat Assessments and Endangered Species Assessments in support of USACE permit applications in the Long Island and New York Harbor areas.

Environmental Permitting Services, Suffolk County Department of Public Works, Yaphank, NY

Ms. Billerman is currently project manager for an SCDPW project developing Environmental Data Reports, in support of the county's permit applications for 10-year dredging permits. In her capacity as project manager Ms Billerman worked closely with government agencies and Suffolk County to develop a template for a combined Essential Fish Habitat Assessment and Endangered Species Assessment to help meet the environmental data requirements necessary for coordination with USACE, NMFS, USFWS, and NYSDEC. .

Long Island Power Authority West Islip to Captree Island Submerged Aquatic Vegetation Study

Assisted in data collection and report production to comply with required environmental study in compliance with NYSDEC wetland permit and DOS Coastal consistency approval for LIPA's Great South Bay cable crossing

Keyspan Energy & Long Island Power Authority Electrical Stations, Calverton and Riverhead

Ms. Billerman conducted ecological and field investigations to characterize impacts to onsite wildlife in support of SEQRA Environmental Assessments and NYSDOS & Federal coastal Zone Consistency Determinations

Williamsburg Pier Reconstruction and Shore Stabilization and Mill Basin Essential Fish Habitat Assessments

Ms. Billerman assisted in the production of EFH Assessments and addressing USACE comments in support of permit applications for projects in the New York Harbor and Brooklyn areas

NYCDEP Jamaica Bay Ecosystem Studies

In an extensive field survey of the Jamaica Bay Ecosystem, Ms. Billerman assisted in data and field collection of finfish, water quality and ichthyoplankton collections. This study included analysis and identification of over 1000 ichthyoplankton samples as well as coordinating all data generated from the laboratory samples into a data base for report production.

Atlantic Coast of Long Island: Fire Island to Montauk Point, New York

As part of an extensive field effort, Ms. Billerman assisted in field studies and the mapping of SAV and macroalgal beds and the assessment of forage fish and invertebrate communities that inhabit the beds in estuaries located along the south shore of Long Island.

JANET COLLURA
SENIOR ECOLOGIST

Education:

B.S., College of New Rochelle - Biology
M.S., Adelphi University - Biology

Professional Affiliations:

American Littoral Society
Society of Wetland Scientists
NY Flora Association

Certifications:

Professional Wetland Scientist - SWS Certification Program
Certification # 000440

RESPONSIBILITIES:

- Project Design and Implementation
- Regulatory Permitting
- Wetlands Delineation Team

EXPERIENCE:

Ms. Collura joined EEA in 1986 as a staff ecologist. Ms. Collura has performed environmental assessments and permitting tasks for various public and private agencies within the New York area including the five boroughs, Long Island and the lower New York counties. She recently was a team member for the Suffolk County Department of Public Works (SCDPW) project to develop Environmental Data Reports including Essential Fish Habitat (EFH) Assessments and Endangered Species Assessments. Ms. Collura completed a freshwater wetlands creation study using dredged material at the Fresh Kills Landfill for NYC Department of Sanitation (NYCDOS). Ms. Collura was involved in the Jamaica Bay Literature Review, Sediment Chemistry Collection at select Marine Transfer Stations and Fresh Kills Sediment Coring and Chemistry.

Ms. Collura was a key scientist for the wetlands mitigation/restoration for Flushing Airport in College Point, Queens. She completed a natural resource evaluation for development and preservation plans for the wetlands of the Staten Island Corporate Park (SICP) in the northwestern portion of the island. Ms. Collura conducting several natural resource assessments within the Borough of Staten Island for EIS completion, Federal and State permitting and CEQR EAS requirements. Both CEQR EAS and SEQR EAF projects include SICP Hilton Garden Inn, SICP Southport Plaza, Fulton Fish Market Relocation, Staten Island Mariner's Harbor, Northern Sea View, Anable Basin, and numerous Long Island development projects.

Ms. Collura analyzed the wetlands and ecological resources for a proposed stream relocation on Purdy Creek in Staten Island. Ms. Collura has completed a terrestrial ecology study for a major EIS in the Spring Creek area of Brooklyn, as well as other freshwater and tidal wetlands investigations in the New York area. Ms. Collura performed wetlands delineations, wildlife surveys, uplands ecology and literature reviews for the Sludge Management Plan EIS for NYCDEP encompassing the five boroughs of New York City.